SUPPORTING DOCUMENT No. 7

Correspondence to the Permittees Regarding the Permit Renewal Process and Inadequacy of Existing Programs

A document presented to the Regional Board on February 11, 2004.
Letters and other information communicated to the Permittees including:

a. Notice of Permit Renewal, March 29, 2002
b. CWC Section 13267 Request for Information Regarding the Status of Program Implementation, April 17, 2002
c. Specifications for Updating the Storm Water Management Plan for the Permit Renewal, July 19, 2002
d. Notice of Violation No. R9-2002-360, November 6, 2002
e. Program Evaluation Report, December 11, 2002

5. Nitrate Nitrogen
6. Ammonia Nitrogen
7. Phenol
8. Surfactants (MBAS)

(e) Analytical Monitoring Parameters: At a minimum, collect samples for analytical laboratory analysis of the following constituents:

1. Total Hardness
2. Oil and Grease
3. Diazinon and Chlorpyrifos
4. Cadmium (Dissolved)
5. Copper (Dissolved)
6. Lead (Dissolved)
7. Zinc (Dissolved)
8. Enterococcus Bacteria
9. Total Coliform Bacteria
10. Fecal Coliform Bacteria

(f) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.

(2) The Dry Weather Monitoring Program should include criteria for dry weather inspection, analytical and field screening monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify the source causing the exceedance of the criteria.

(3) Dry weather analytical and field screening monitoring stations identified to exceed dry weather monitoring criteria for any constituents should continue to be screened in subsequent years.

(4) The Dry Weather Monitoring Program should include procedures for source identification follow up investigations in the event of exceedance of dry weather analytical and field screening monitoring result criteria.

(5) The Dry Weather Monitoring Program should include procedures to eliminate detected illicit discharges and connections. These procedures should be consistent with each Copermittee's Illicit Connections and Discharge and Elimination component of its storm water management plan.

(6) During monitoring, the accuracy of the MS4 map and should be confirmed.

(7) The Dry Weather Monitoring Program should include a proposed plan to annually summarize and report the monitoring results.

California Regional Water Quality Control Board
San Diego Region

Winston H. Hickox
Secretary for Environmental Protection

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Gray Davis
Governor

March 29, 2002

File No: 10-7000.03

Mr. David P. Zappe
General Manager-Chief Engineer
Riverside County Flood Control and Water Conservation District
1995 Market Street
Riverside, CA 92501

Dear Mr. Zappe:

SUBJECT: MUNICIPAL STORM WATER PERMIT FOR RIVERSIDE COUNTY, THE SANTA MARGARITA WATERSHED

The purpose of this letter is to provide you with advanced notice regarding the renewal of the Municipal Separate Storm Sewer (MS4) National Pollutant Discharge Elimination System (NPDES) Permit for the Santa Margarita Watershed in Riverside County (Permit No. CAS0108766), and to express our interest in early coordination to facilitate the renewal process. As you know, the current permit will expire on November 30, 2003. Pursuant to 40 CFR 122.21(d), the Principal Permittee must submit an application for a new permit by May 31, 2003.

Regarding permit requirements, the California Water Quality Control Board, San Diego Regional Board (Regional Board), has recently issued new MS4 permits for San Diego County (Order No. R9-2001-01) and Orange County (Order No. R9-2002-0001). The requirements for these third-term permits were revised to strengthen municipal storm water programs and ensure compliance with federal storm water regulations. The requirements are all logical extensions of requirements in the first and second term permits. Some are also based on precedent-setting decisions that the State Board determined necessary for the protection of water quality. We will be using these requirements as a template for 2003 permit for the Santa Margarita Watershed.

The MS4 permits for Orange County and San Diego County and their accompanying Fact Sheets, which contain justifications for revised requirements, can be downloaded from our web page at http://www.swrcb.ca.gov/rwqcb9/.

We realize that revising and implementing new ordinances and municipal programs is a time-consuming and complex process. Therefore, we are informing you of these potential new MS4 permit requirements now so that you may begin the planning process well in advance. Regional Board staff, Megan Fisher, will be contacting you and the other Permittees in the near future to discuss the possibility of scheduling early coordination meetings.

(8) Assessing the overall health of receiving waters and identifying long term trends in receiving water quality.

b) The location of all sampling points, clearly identified on a map;

c) Why the locations are representative;

d) The frequency of sampling;

e) Parameters to be sampled; and

f) A description of sampling equipment and quality assurance plans.

g) The specific needs of the permitted area must be considered when developing the monitoring program. Based on the land uses in the permitted area and to obtain data consistent with other municipal storm water programs, the Regional Board recommends the following components, at a minimum, for the monitoring program for the Santa Margarita Watershed in Riverside County:

i) **Mass Emissions** – select and monitor receiving water stations for mass emissions of storm water and urban runoff in the Santa Margarita River and its major tributaries, including but not limited to Murrieta, Temecula, and Warm Springs Creeks. At least one station in the Santa Margarita River should be located near the San Diego County line to determine mass emissions from the permitted area of the watershed. At least one reference station should be monitored in a natural area as a comparison to help identify pollutants from urban areas.

ii) **Toxicity Monitoring** – develop a program to evaluate the extent and causes of toxicity in receiving waters.

iii) **Bioassessment** – develop a bioassessment program, including station selection, to assess the biological integrity of receiving waters, to detect biological responses to pollution, and to identify probable causes of impairment not detected by chemical and physical water quality analysis. Reference stations should be selected and monitored to determine the biological integrity of unimpacted areas.

iv) **Study of Impacts from New Development and Construction** – develop a study to monitor impacts to receiving waters from new development and construction activity. The proposed study should include the selection of monitoring sites in Murrieta and Temecula, and other rapidly developing areas, that are representative of sub-watersheds that are currently being developed, or have been recently developed. Reference stations shall also be monitored for this study. Ideally, reference stations should be in the same receiving water as another monitoring station, upstream of the developed, or developing area.

v) **BMP Effectiveness** – conduct, or participate in studies to evaluate the effectiveness of structural and treatment control BMPs.

vi) **Peak Discharge Impact Study** – conduct a study to evaluate peak flow control and to determine numeric criteria for peak flow to prevent or minimize downstream erosion of natural stream channels and banks caused by urbanization.

9) **Dry Weather Analytical and field Screening Monitoring**

a) Compile a list of the sources of all illicit discharges identified during the previous permit term.

b) Develop a proposed program to identify and monitor representative outfalls to receiving waters for the purpose of detecting and eliminating illicit connections and illegal discharges to the MS4. The Dry Weather Monitoring Program should include the following components:

- Pet and animal waste disposal;
- Proper solid waste disposal (e.g., garbage, tires, appliances, furniture, vehicles);
- Equipment and vehicle maintenance and repair;
- Public reporting mechanisms;
- Green waste disposal;
- Integrated pest management;
- Native vegetation;
- Proper disposal of boat and recreational vehicle waste;
- Traffic reduction, alternative fuel use; and
- Water conservation

iii) In addition to the topics listed above, the municipal, industrial, commercial, and quasi-governmental communities should also be educated on the following topics where applicable:

- Basic urban runoff training for all personnel;
- Additional urban runoff training for appropriate personnel;
- Illicit Discharge Detection and Elimination observations and follow-up during daily work activities;
- Lawful disposal of catch basin and other MS4 cleanout wastes;
- Water quality awareness for Emergency/First Responders;
- California's Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction);
- California's Statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities;
- SDRWQCB's General NPDES Permit for Groundwater Dewatering
- 401 Water Quality Certification by the SDRWQCB;
- Statewide General NPDES Utility Vault Permit (NPDES No. CAG990002);
- SDRWQCB Waste Discharge Requirements for Dredging Activities;
- Local requirements beyond statewide general permits;
- Federal, state and local water quality regulations that affect development projects;
- Water quality impacts associated with land development;
- Alternative materials & designs to maintain peak runoff values;
- How to conduct a storm water inspection;
- Potable water discharges to the MS4;
- Dechlorination techniques;
- Hydrostatic testing;
- Spill response, containment, & recovery;
- Preventive maintenance; and
- How to do your job and protect water quality.

iv) In addition to the topics listed in h.ii. above, residential, general public, and school children communities should be educated on the following topics where applicable:

- Public reporting information resources;
- Residential and charity car washing; and
- Community activities related to storm water and water quality and ways to get involved.

v) A description of the content, form, and frequency of proposed education efforts for each target community.

We look forward to working with you on the permit renewal process. Please contact Ms. Fisher, at (858) 268-5363, with any questions regarding this letter.

Respectfully,

JOHN H. ROBERTUS
Executive Officer

JHR:rwm:mbf

cc: Mr. John Johnson
Riverside County
4080 Lemon Street, 12th Floor
Riverside, CA 92501

Mr. Andy Powell
City of Murrieta
26442 Beckman Court
Murrieta, CA 92562

Mr. John Pourkazemi
City of Temecula
P.O. Box 9033
Temecula, CA 92589

non-storm water discharges; and (7) any other relevant factors. At a minimum, the following sites shall be high priority:

(a) Sites that are 50 acres or greater in size and grading will occur during the wet season; and
(b) Sites that are 5 acres or greater and tributary to a Clean Water Act section 303(d) water body impaired for sediment or within or directly adjacent to or discharging directly to an ESA.

iv) A description of specific pollution prevention, source control, and treatment control BMPs to reduce pollutants to the MEP from runoff from construction sites that are to be implemented for each priority category during the life of the permit, accompanied with a proposed schedule for implementing the BMPs and a description of how they will be required.

v) A plan for inspecting construction sites for compliance with ordinances and permits. Inspections should include a review of site erosion control and BMP implementation plans. The plan should include frequencies for inspecting each priority category, inspection procedures, and follow-up actions for non-compliant sites.

vi) A description of how non-compliant sites that pose a threat to human or environmental health will be identified and the process for notifying the Regional Board.

vii) A description of appropriate educational and training measures to ensure that Copermittee staff, project applicants, contractors, developers, property owners, and other responsible parties have an understanding of the following:

(a) Federal, state, and local water quality laws and regulations applicable to construction and grading activities.
(b) The connection between construction activities and water quality impacts (i.e., impacts from land development and urbanization).
(c) How erosion can be prevented.
(d) How impacts to receiving water quality resulting from construction activities can be minimized (i.e., through implementation of various source control and structural BMPs).

g) Illicit Connection and Discharge Elimination Component

i) A description of a proposed program to actively seek and eliminate illicit discharges and connections. This program shall address all types of illicit discharges, except those listed as exempt in the current permit (Order No. 98-02).

ii) A description of a proposed dry weather analytical monitoring program to detect illicit discharges and connections (see Section 9 below).

iii) A description of proposed investigation and inspection procedures to follow-up on dry weather analytical monitoring results or other information that indicates potential illicit discharges or connections.

iv) A description of methods to prevent, respond to, contain, and clean up all spills, including sewage from treatment plants, private laterals and failing septic systems, in order to prevent entrance into the MS4.

v) A description of the mechanism to receive notification of spills from private laterals.

vi) A description of efforts to facilitate public reporting of illicit discharges and connections, including a public hotline.

identification of appropriate mitigation measures. Examples of questions to be considered include:

(a) Could the proposed project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).
(b) Could the proposed project result in significant alteration of receiving water quality during or following construction?
(c) Could the proposed project result in increased impervious surfaces and associated increased runoff?
(d) Could the proposed project create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?
(e) Could the proposed project result in increased erosion downstream?
(f) Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?
(g) Is project tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?
(h) Could the proposed project have a potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters?
(i) Could the proposed project have a potentially significant adverse impact on ground water quality?
(j) Could the proposed project cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?
(k) Can the project impact aquatic, wetland, or riparian habitat?

v) A proposed education program to educate Copermittee staff and developers on requirements to reduce storm water pollution from new developments and significant redevelopment. The program should include:

(1) Internal: Municipal Staff and Others

(a) Federal, state, and local water quality laws and regulations applicable to development projects;
(b) The connection between land use decisions and short and long-term water quality impacts (i.e., impacts from land development and urbanization); and
(c) How impacts to receiving water quality resulting from development can be minimized (i.e., through implementation of various source control and structural BMPs).

(2) External: Project Applicants, Developers, Contractors, Property Owners, Community Planning Groups

As early in the planning and development process as possible, each Copermittee shall implement a program to educate project applicants, developers, contractors, property owners, and community planning groups on the following topics:

(a) Federal, state, and local water quality laws and regulations applicable to development projects;

(b) Required federal, state, and local permits pertaining to water quality;

California Regional Water Quality Control Board
San Diego Region

Winston H. Hickox
Secretary for Environmental Protection

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Gray Davis
Governor

CERTIFIED MAIL NO._____(RETURN RECEIPT REQUESTED)

April 17, 2002

Mr. David Zappe
Riverside County Flood Control
and Water Conservation District
1995 Market Street
Riverside, CA 92501

Mr. John Pourkazemi
City of Temecula
43174 Business Park Drive
P.O. Box 9033
Temecula, CA 92589

Mr. Andy Powell
City of Murrieta
26442 Beckman Court
Murrieta, CA 92562

Mr. Christopher Hans
County of Riverside
4080 Lemon Street, 12th Floor
Riverside, CA 92501

Dear Permittees:

SUBJECT: ANNUAL REPORTING FOR ORDER NO. 98-02

California Regional Water Quality Control Board, San Diego Region (Regional Board) staff have reviewed the 2000-2001 Annual Progress Report (Annual Report), dated September 13, 2001, for the Municipal Storm Water National Pollutant Discharge Elimination System Permit (Order 98-02) for the Santa Margarita Watershed in Riverside County. As stated in your application for permit renewal, dated January 17, 1995, the purpose of the Annual Report is to demonstrate compliance with the permit and to provide a mechanism for improving the implementation of activities or to provide information improving the management of storm water pollution control programs. The Annual Report fails to provide sufficient information to achieve these stated objectives. For example, it does not contain evaluations or assessments of control measures, identification of water quality improvement or degradation, or specific quantitative information about Permittee program implementation. Please see the enclosed Staff Analysis (Attachment 1) for a detailed explanation of Annual Report deficiencies.

Moreover, the Annual Reports must contain more specific and quantitative information and assessments to achieve its objectives. Attachment 2 to this letter contains a list of additional information that will help determine the status of program implementation. Pursuant to California Water Code (CWC) 13267, the Permittees are hereby directed to include, at a minimum, the information listed in Attachment 2 in future Annual Reports, due annually on September 15. The list was developed to be consistent with the current reporting format. You may modify the existing reporting forms to include the additional information, or address it separately. Where additional information is not requested, such as the public education section,

Flow-based BMPs should be designed to mitigate (infiltrate, filter, or treat) either:

(a) The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or
(b) The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or
(c) The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

(4) Pollutants or Conditions of Concern - The SUSMP should include a procedure for identifying pollutants or conditions of concern for each new development or significant redevelopment project. The procedure should include, at a minimum, the identification of (1) receiving water quality (including pollutants for which receiving waters are listed as impaired under Clean Water Act section 303(d)); (2) land use type of the development project and pollutants associated with that land use type; (3) pollutants expected to be present on site; (4) changes in storm water discharge flow rates, velocities, durations, and volumes resulting from the development project; and (5) sensitivity of receiving waters to changes in storm water discharge flow rates, velocities, durations, and volumes.

(5) Implementation Process – The SUSMP should include a process by which each Copermittee will implement SUSMP requirements. The process should identify at what point in the planning process development projects will be required to meet SUSMP requirements. The process should also include identification of the roles and responsibilities of various municipal departments in implementing the SUSMP requirements, as well as any other measures necessary for the implementation of SUSMP requirements.

(6) Restaurants Less than 5,000 Square Feet - New development and significant redevelopment restaurant projects where the land area development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirement F.1.b.(2)(c) and peak flow rate requirement F.1.b(2)(b)(i). A restaurant is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

(7) Infiltration and Groundwater Protection – To protect groundwater quality, each Copermittee should apply restrictions to the use of structural treatment BMPs which are designed to primarily function as infiltration devices (such as infiltration trenches and infiltration basins). Such restrictions shall ensure that the use of such infiltration structural treatment BMPs shall not cause or contribute to an exceedance of groundwater quality objectives. At a minimum, use of structural treatment BMPs which are designed to primarily function as infiltration devices shall meet the following conditions:[8]

[8] These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

each Permittee shall continue to report the information that is currently included in the Annual Reports. Each Permittee is responsible for submitting the required information to the Principal Permittee for inclusion in the Annual Report.

The submitted report shall include the following signed certification:

> *I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

Failure to submit the above information by the date requested may result in the imposition of administrative civil liability pursuant to CWC sections 13268 and 13385.

Furthermore, while gathering data and information for your Annual Report, you should consider the NPDES permit application requirements for MS4s [40 CFR 122.26(d)]. By May 31, 2003, you will be required to submit an application for renewal of the MS4 permit, and it will be necessary to include all of the federal requirements. We will be sending further correspondence with specific application requirements in the near future.

Contact Megan Fisher, at (858) 268-5363, with any questions pertaining to this letter.

Respectfully,

JOHN H. ROBERTUS
Executive Officer

JHR:rwm:mbf

File No. 10-7000.03

Enclosures:
Attachment 1 (Staff Analysis)
Attachment 2 (Reporting Requirements)

CC: U.S. Environmental Protection Agency, Region IX, Eugene Bromley

stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet.

(d) *All hillside development greater than 5,000 square feet.* This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

(e) *Environmentally Sensitive Areas.* All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter receiving waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition.

(f) *Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.* Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

(g) *Street, roads, highways, and freeways.* This category includes any paved surface which is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

(h) *Retail Gasoline Outlets.* Retail Gasoline Outlet (RGO) is defined as any facility engaged in selling gasoline.

(2) The SUSMP should include a list of recommended source control and treatment control BMPs and require all new development and significant redevelopment projects falling under the above priority project categories or locations to implement a combination of on-site BMPs from the recommended list, including at a minimum (1) source control and (2) treatment control BMPs. The BMPs shall:

(a) Be located on site and designed to effectively treat the runoff from each specific site;

(b) Control the post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat;

(c) Conserve natural areas where feasible;

(d) Minimize storm water pollutants of concern in urban runoff from each specific new development or significant redevelopment (through implementation of appropriate source control BMPs). Identification of pollutants of concern should include, at a minimum, all pollutants for which water bodies receiving the development's runoff are listed as impaired under Clean Water Act section 303(d), all pollutants associated with the land use type of the development, and all pollutants commonly associated with urban runoff;

(e) Remove pollutants of concern from urban runoff (through implementation of effective structural treatment BMPs appropriate for treating the specific pollutants of concern from the site);

(f) Minimize directly connected impervious areas where feasible;

(g) Protect slopes and channels from eroding;

(h) Include storm drain stenciling and signage;

(i) Include properly designed outdoor material storage areas;

(j) Include properly designed trash storage areas;

California Regional Water Quality Control Board

San Diego Region

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Gray Davis
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TO: RIVERSIDE COUNTY MS4 PERMIT FILE (FILE NO. 10-7000.03)

FROM: MEGAN FISHER, ENVIRONMENTAL SCIENTIST

DATE: April 16, 2002

SUBJECT: STAFF ANALYSIS OF THE 2000-2001 ANNUAL REPORT FOR THE MS4 NPDES PERMIT (ORDER NO. 98-02) FOR THE SANTA MARGARITA WATERSHED IN RIVERSIDE COUNTY – ATTACHMENT 1

The following is an analysis of each Permittee's activities related to requirements of the Riverside County, Santa Margarita Watershed Municipal Separate Storm Sewer System (MS4) NPDES Permit (Permit). It is difficult to determine specific requirements for many of the program areas because the timelines in the Drainage Area Management Plan (DAMP) only go through 1995, and it was never revised in accordance with the NPDES Permit Application, dated January 17, 1995. The activities listed below are clearly required under the Permit or are specified in the permit application or in programs that the Permittees submitted with the 1998-1999 Annual Report.

GENERAL

- There is no certification of the report as required by Part II.12. of the permit.
- Overall, the annual report does not meet the reporting requirements in the Permit (Part I.B). Many of the reporting forms lack quantitative information, making it impossible to evaluate programs. For example, reporting that a Permittee's efforts have increased or decreased does provide a description of the status of program implementation, water quality improvement or degradation, or the number and nature of enforcement actions, inspections, and public education programs.

STREET SWEEPING PROGRAM

Requirements (according to Appendix 1 of the 1998-1999 AR):

- County of Riverside: Sweep all streets monthly
- Murrieta: Sweep all streets twice a month
- Temecula: Plan implies once a week

Compliance:

- County of Riverside: In compliance
- Murrieta: In compliance (assuming the 2 means 2/month)
- Temecula: Compliance cannot be determined

d) Residential Component

i) A completed inventory of high priority residential areas and activities. At a minimum, high priority areas and activities include:

(a) Automobile repair and maintenance;
(b) Automobile washing;
(c) Automobile parking;
(d) Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
(e) Disposal of household hazardous waste;
(f) Disposal of green waste;
(g) Any other residential source that the Copermittees determine may contribute a significant pollutant load to the MS4;
(h) Any residence within or directly adjacent to or discharging directly to an ESA; and
(i) Any residence tributary to a Clean Water Act Section 303(d) impaired water body, where the residence generates an impairing pollutant.

ii) A description of specific pollution prevention, source control, and treatment control BMPs to reduce pollutants to the MEP from high priority residential areas that are to be implemented during the life of the permit, accompanied with a proposed schedule for implementing the BMPs and a description of how they will be required.

e) Development Planning Component

A description of planning procedures including a comprehensive master plan to develop, implement, and enforce controls to reduce the discharge of pollutants from new development and significant redevelopment[5] project sites to the MEP. Such plans shall include on-site controls to reduce pollutants in storm water runoff after construction is completed and the process by which each Copermittee will require such controls prior to project approval and issuance of local permits. These procedures should include:

i) A workplan for the inclusion of water quality and watershed protection principles and policies in each Copermittee's General Plan. Examples of principles and policies to be considered include:

(a) Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible slow runoff and maximize on-site infiltration of runoff.
(b) Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants off site and into an MS4.
(c) Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas.

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[5] Significant redevelopment means the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria described in Section e.iii.3 applies only to the addition, and not to the entire development.

General Comment:

- According to the DAMP, Permittees will prioritize streets for increased sweeping. The Annual Report does not indicate that streets have been prioritized.

SOURCE IDENTIFICATION AND PRIORITIZATION

Requirements (according to Permit, Appendix 1.D):
The Permittees are required to develop and update annually, at a minimum, a list of facilities that discharge storm water associated with industrial activity. The list should also include other categories of facilities that may discharge significant quantities of pollutants in storm water. The list should be prioritized to indicate individual sources, or categories of sources which the Permittees believe are the most significant sources of pollutants.

Compliance:
None of the Permittees addressed this requirement in the past 2 annual reports.

INSPECTION PROGRAM FOR INDUSTRIAL/COMMERCIAL FACILITIES

Requirements (according to Permit, Appendix 1.E and the 1998-1999 AR):
Permittees are required to develop and implement a program to inspect industrial and commercial facilities to evaluate storm water pollution control efforts. The program must include follow-up enforcement of local requirements.

The Permittees proposed to expand existing inspections that are conducted by County Department of Environmental Health (RCDEH). The Permittees' compliance Assistance Program is supposed to provide support to supplement the regular inspections. RCDEH is supposed to provide storm water outreach and gather information that will be provided to the Permittees in the form of inspection reports and referrals.

Compliance:
The Annual Report states that some storm water education material is distributed by County Environmental Health staff during existing facility inspection programs. However, the report also states that actual storm water inspections, reporting, and referral of violations of local or state storm water regulations is not occurring. No inspection reports related to storm water have been included, and there is not mention of enforcement follow-up

Although it is not clear that the Compliance Assistance Program is actually functioning, the proposed program represented a good effort to comply with industrial/commercial inspection requirements in the permit. The 3-year agreement expires June 30, 2002. Permittees need to address how the inspection requirement will be met when this expires.

been evaluated to determine if retrofitting the device to provide additional pollutant removal is feasible.

b) Industrial Component

i) A completed inventory of all industrial facilities as defined at 40 CFR 122.26(b)(14), and any other facilities that the Copermittees believe may contribute significant quantities of pollutants to storm water, regardless of whether or not the facility is subject to the statewide General Industrial Activities Storm Water Permit (GIASP) or other individual NPDES permit. The inventory shall include the following minimum information for each industrial site:

(1) Facility name;
(2) Facility address; and
(3) A narrative description of the industrial activity, including the SIC code which best reflects the principal products or services provided.

ii) The inventory shall be prioritized to indicate the individual sources, or categories of sources, which the Copermittees believe are the most significant sources of pollutants. Each facility should be classified as high, medium, or low threat to water quality, based on the following factors:

(a) Type of industrial activity (SIC code);
(b) Materials used in industrial processes;
(c) Wastes generated;
(d) Pollutant discharge potential;
(e) Non-storm water discharges;
(f) Size of facility;
(g) Proximity to receiving water bodies;
(h) Sensitivity of receiving water bodies;
(i) Whether the site is subject to the GIASP; and
(j) Any other relevant factors.

At a minimum, the high priority industrial sites shall include:

(a) Facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA);
(b) Facilities within or directly adjacent to or discharging directly to an ESA;
(c) Facilities tributary to a Clean Water Act section 303(d) impaired water body, where the facility generates in impairing pollutant;
(d) Facilities subject to the GIASP (not including facilities with no exposure of industrial activity); and
(e) All other facilities that the Copermittees determine are contributing significant pollutant loading to its MS4.

ii) Facilities that are required to be covered under the GIASP but that have not filed a Notice of Intent should be identified on the inventory.

iii) A description of specific pollution prevention, source control, and treatment control BMPs to reduce pollutants to the MEP from runoff from each priority category of industrial facilities that are to be implemented during the life of the permit, accompanied with a proposed schedule for implementing the BMPs and a description of how they will be required.

iv) A proposed schedule for inspecting industrial facilities for compliance with ordinances, permits, and for BMP implementation. Inspections should include

LEGAL AUTHORITY

Requirements (according to Permit, Appendix 1.G)
Permittees must provide certification that they have adequate legal authority to do the following:

- Control through ordinance, permit, contract, order, or other means, discharges of pollutants into the MS4 from storm water discharges associated with industrial activity;
- Prohibit illicit connections to the MS4;
- Control spills or the dumping of materials other than storm water into the MS4;
- Control through interagency agreements the contribution of pollutants from one portion of the MS4 to another;
- Require compliance with ordinances, permits, contracts or orders; and
- Conduct inspections, surveillance and monitoring to ensure compliance with permits or ordinances.

Compliance:

- Temecula has not submitted a signed certification; the City submitted an unsigned draft.
- It is not clear if they have all adopted the model ordinance, and whether or not the referenced model ordinance is the same as that contained in the 1993 DAMP.

CONSTRUCTION PROGRAM

Requirements (according to Permit, Appendix 1.E and Supplement A of the DAMP):

- Permittees propose to comply with their Inspection/Enforcement Programs at Construction Sites, submitted with the 1998-1999 Annual Report, and Supplement A of the DAMP.

Compliance:

- The only ordinance that is referred to in the County Construction Site Inspection/Enforcement Program is the enforcement of a rubbish accumulation ordinance. The Permittees should have adopted and be enforcing additional ordinances that prohibit the discharge of pollutants, including sediment.
- The plans for inspection/enforcement programs at construction sites for each of the Permittees seem adequate to implement current permit requirements, but the annual reports do not confirm that these programs are being implemented. For example, the report states that the City of Murrieta does not use a checklist for construction site inspections that specifically addresses or includes storm water management concerns or BMPs, and the 1999-2000 Annual Report states that Temecula does not either.
- The annual report does not state the number and nature of inspections and enforcement actions, as required in Permit, Part I.B.6.

DEVELOPMENT PLANNING

Specifications for Updating the Storm Water Management Program for the Santa Margarita Watershed in Riverside County for the Renewal of Order No. 98-02

1) **General information**

Copermittee name, address, telephone number of contact person, and ownership status as a government entity.

2) **Background information for source identification**

a) A topographic map including the following:

i) The locations of known MS4 outfalls;
ii) A description of the land-use activities (e.g. divisions indicating undeveloped, residential, commercial, agricultural, and industrial uses) accompanied with estimates of population densities and projected growth for a ten-year period within the drainage area served by the MS4. For each land use type, an estimate of an average runoff coefficient shall be provided;
iii) The location and description of the activities of each currently operating or closed municipal landfill or other treatment, storage or disposal facility for municipal waste;
iv) The location and permit number of any known discharge to the MS4 that has been issued a NPDES permit;
v) The location of major structural controls for storm water discharge (retention basins, detention basins, major infiltration devices, etc.); and
vi) The identification of publicly owned parks, recreational areas, and other open lands.

3) **Enforcement**

a) A description of legal authority and enforcement mechanisms and how they will be used to enforce all aspects of the storm water management programs listed, including a time schedule for ordinance review and adoption of revisions.

4) **Management Programs**

A description of the existing management programs to control pollutants from the MS4 and proposed improved management programs that cover the duration of the new permit. A comprehensive planning process which involves public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable (MEP) using management practices, control techniques, system design and engineering methods, and other appropriate provisions shall be included. The program shall also include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each Copermittee, or the Principal Permittee may choose to submit one program. You may present this information in a way that is consistent with your existing SWMP, but at a minimum, it should include the following:

a) Municipal Component

i) A completed inventory of all municipal land use areas and activities, prioritized as high, medium, or low threat to water quality. At a minimum, the high priority municipal areas shall include:

(a) Roads, streets, highways, and parking facilities;
(b) Flood management projects and flood control devices;

Requirements:
Permittees propose to comply with Supplement A of the DAMP

Compliance:
- It is not clear if any criteria exists for the type of projects that require post-development BMPs or how the Permittees implement the requirements in Supplement A.
- It would be helpful to have more detailed reporting, such as the number of times community car washing areas have been required in new developments over 100 units. There is no quantitative information in the annual report to indicate that any of those specific BMPs required in Supplement A have been implemented.
- Murrieta's reporting form states that they have not developed an implementation plan or designated departmental responsibilities for Supplement A, and they have not conducted any training on the subject.
- The Conditions of Approval for Land Development Plan in the City of Temecula, as included in the 1998-1999 Annual Report, do not include requirements from Supplement A, or any storm water mitigation measures, only flood control measures, unless a site is 5 acres or greater and needs to comply with the General Construction Activities Permit. The Erosion Control Notes are pretty adequate.

Other Comments:
- Should begin considering SUSMP and numeric design criteria
- All projects that are considered priority, including projects considered ministerial under CEQA, will need to comply with the development planning requirements in the next permit (see San Diego and Orange County permits)

ILLICIT CONNECTIONS/ILLICIT DISCHARGE PROGRAM

Requirements (according to Permit, Appendix 1.G)
Permittees must prohibit illicit connections to the MS4 and control spills or the dumping of materials other than storm water to the MS4.

Compliance:
- Procedures for detection and abatement of illicit discharges and protocols are not defined.
- None of the Permittees have proactive IC/ID programs. The County has ceased looking for discharges because they did a reconnaissance survey pursuant to the 1990 permit that revealed that the number of illicit connections was low. They should be implementing alternative ways to be proactive regarding illicit connections and dumping – new connections could have been made over the last 10 years.

5.5.4 The reporting for this program is inadequate, and there seems to be a disconnect between what is included in the Annual Report and what is actually happening. The lead facilities inspector and the HAZMAT report indicate that illegal discharges and spills are frequently occurring, possibly in increasing numbers. However, the Annual Report only reports one incident of tree limb dumping. The various programs to respond to illegal discharges and dumping should be better coordinated so that follow up activities can occur and be better tracked and problem areas can be targeted.

5.6 Public Agency Activities

5.6.1 The municipal yard drains to an infiltration basin. The fueling, maintenance, and oil storage areas appeared clean. There is a designated vehicle wash down area that drains to a clarifier.

5.6.2 The RCFCWCD mows natural channels once a year and applies herbicides to inhibit plant growth on an as needed basis. When possible, access roads are constructed on both sides of channels for heavy equipment. These practices do not consider impacts to water quality.

5.7 Monitoring Program

5.7.1 None of the goals of the monitoring program have been met and the monitoring data has not been analyzed or used for any purpose, to date.

- The Annual Report does not contain numbers of incidents reported, responded to, cleaned up, etc... The reporting forms need to include specific information, whether or not the Permittee's effort has increased or decreased cannot be used to evaluate the program.
- There is no record keeping of illicit discharges and no specific training for this program.
- The annual report states that Permittees conduct activities to detect illicit connections and discharges when the possibility is indicated by the monitoring program, citizen complaints, staff observations, or other sources. However, the monitoring report does not document that source identification and elimination as a result of monitoring results has occurred. These incidences need to be summarized in the annual report. The report includes a phone number for reporting illegal dumping and other discharges for the County, but there is no reporting number for Murrieta or Temecula. I can't find spill and illegal dumping reporting numbers on any of the Permittees' websites.
- The HAZMAT program does have good record keeping and reporting, but it is not clear if the Permittees contact HAZMAT for all spills and/or dumping

RESIDENTIAL AND PUBLIC INFORMATION

Requirements:
No specific requirements in Permit.

Compliance:
- Good public education efforts and materials on the part of the Principal Permittee. It is not evident that Murrieta and Temecula produce or distribute materials.
- It would be helpful to report numbers, such as how many radio and TV spots have they run for storm water education?
- Good household hazardous waste collection program and reporting.

ENFORCEMENT

Requirements:
- Permittees are required to establish legal authority and enforce all Permit requirements.
- Permit, Part I.B.6 requires that the annual report contain a summary of numbers and types of enforcement actions.

Compliance:
- No enforcement actions have been reported, except for "cease and desist" letters to homeowners for dumping pet waste.
- If Permittees have taken storm water enforcement actions, numbers and types of actions taken are not adequately reported.

4.4.1 The County has a database to track who reports incidents of illegal discharges and dumping and how they are followed up. All complaints are addressed within 48 hours.

4.4.2 The HAZMAT team seems to efficiently respond to spills of hazardous materials.

4.4.3 The County does not have a proactive program to detect illicit connections and discharges, they mainly depend on public reporting of spills or dumping, and code enforcement is not typically used.

4.5 Public Agency Activities

4.5.1 The ABOP facility is clean and maintains good records. The program provides a convenient opportunity for residents to properly dispose of household hazardous wastes.

4.5.2 There are several uncontained stockpiles at the County municipal yard and staff indicated that equipment is pressure washed on site with no BMPs to control or treat the runoff. Maintenance staff need to be better educated about storm water regulations and BMPs that should be implemented at yards.

4.6 Industrial/Commercial Facilities Inspection Program

4.6.1 Facilities are inspected multiple times a year by the Department of Environmental Health, and the inspectors now have a checklist (survey) form specifically for storm water.

4.6.2 Both inspectors observed conducted thorough inspections and seem knowledgeable about fundamental storm water issues and BMPs.

4.6.3 The County stated that they have no funds for industrial/commercial inspections unless they are tied to another state program.

4.6.4 The inspectors do not have any enforcement capabilities related to storm water, and inspections are focused on other regulations. For example, the uncontained dirt stockpiles did not concern the inspector because they are not a hazardous material.

4.6.5 The way the CAP is currently set up, the County is responsible for follow up and any necessary enforcement activities for facilities surveyed by County inspectors within County jurisdiction. It was not evident that any follow-up has been conducted, or that a program exists to conduct follow-up inspections and enforcement action.

4.6.6 The County does not require business licenses and has not attempted to use other means to identify additional industrial/commercial facilities that may discharge significant quantities of pollutants in storm water that are not covered by the CAP.

MONITORING PROGRAM

The Flood Control District has taken the responsibility for implementation of the monitoring program.

Requirements (according to the Consolidated Program for Water Quality Monitoring (1994) and the Application for Renewal (1995)):

1) Program Objectives:
- Assessment of mass loadings from storm drains
- Assess influence of land use on water quality
- Verification and control of illicit discharges
- Compliance monitoring of water quality
- Assess effectiveness of various urban practices designed to control pollution
- Identify problem areas and/or trends
- Establish database for future reference
- Identify baseline conditions
- Identify pollutants of concern

2) Dry weather sampling stations:
- Wildomar Channel
- Cal Oaks Drain (permanent station)
- Empire Creek Channel
- Redhawk Parkway Drain

3) Wet weather stations:
- Wildomar Channel
- Cal Oaks Drain
- Empire Creek Channel

4) Sediment sampling at the above stations plus the I-15 basin

5) Receiving water stations
- Upper Murrieta
- Lower Murrieta
- Temecula Creek

6) Toxicity testing

illicit discharges, and assist City staff in responding quickly to the appropriate area.

3.4.2 The MS4 system has been mapped in a GIS.

3.4.3 Prior to approval of new tracts connecting to the MS4, the City requires the developer to camera and submit a video of all the new storm drains.

3.4.4 The City stated that pool installation contractors have historically been a source of illicit discharges, and they are now required to post a $1000 security deposit before beginning work.

3.4.5 The City does not have a proactive program to detect illicit connections and discharges, they mainly depend on public reporting of spills or dumping, and code enforcement is not typically used.

3.5 Public Agency Activities

3.5.1 Streets are swept twice a month, and this activity is contracted out.

3.5.2 The City does not currently have a mechanism to clean out catch basins. Although catch basins are inspected on an annual basis, and it does not appear to be a problem, it is unclear whether or not catch basins are cleaned out when needed. The City plans to begin training staff in confined space entry procedures to allow staff to enter and clean catch basins and the MS4.

3.5.3 There were uncontained stockpiles at the municipal yard.

3.6 Industrial/Commercial Inspection Program

3.6.1 Industrial/commercial facilities had not been identified and prioritized based on threat to water quality. The way the CAP is currently set up, the City is responsible for follow up and any necessary enforcement activities for facilities surveyed by County inspectors. However, the CAP does not seem to be working and needs improvement. It was not evident that the City had received any referrals for follow-up from the RCFCWCD.

3.6.2 The City has not developed a program, or plan, to inspect those industrial/commercial facilities not covered by the CAP.

3.7 Training

3.7.1 There seems to be an overall lack of specific NPDES/storm water training for City staff.

4 County of Riverside

Evaluation conducted on Thursday, November 21, 2002. Regional Board staff present included: Megan Fisher, Eric Becker, and Jeremy Haas. Copermittee staff present included: Alex Gann, Darrel, Jim Sappington, Steve Dondalski, Sandy, Bob Lehman, Kathy Gifford, Earl Tuntland, Stephen Van Stickum, Nick Anderson, Ron Goldman, and Brian Beeler. Steve Stump and Linda Garcia from the RCFCWCD were also present, along with their consultant, Bob Collicot.

Frequency or numbers of samples for the components listed above are not specified.

Compliance:

- The Monitoring Program has not achieved any of its objectives. The 1999-2000 and 2000-2001 Monitoring Reports contain no attempt to address any of the above objectives. They contain the same discussions, with no data analysis whatsoever. The data submitted does not include units, detection limits, analytical methods, or individual concentrations for each sampling event. All data is averaged into one concentration (of unknown unit) for all events and all stations. It is impossible to evaluate the data or make any determinations regarding problem areas, trends, or potential sources from the data provided.
- Although there was no attempt to identify pollutants of concern, several constituents that are commonly POCs in urban areas (bacteria, diazinon, and chlorpyrifos) where detected in 100% of samples, but there was no further analysis. The Reports do not indicate that any source identification has occurred as a result of monitoring data.
- Have not calculated any mass emissions (I'm not sure if and how they've been measuring flow).
- Only 1 sediment sample has been taken in the history of the program, with no explanation.
- No wet weather samples were taken in the receiving waters last year, with no explanation.
- No toxicity testing reported.

Suggested Improvements:

- Reporting concentrations for all station events, including units, detection limits, reporting levels, and analytical methods
- Identifying station events that exceed applicable water quality standards
- Identify POCs by analyzing all existing data
- Use EPA methods for sample collection and analysis
- Calculate mass emissions
- Develop targeted number and frequency of sampling events at each station
- Conducting toxicity testing on freshwater species
- Data analysis (characterize storm water runoff, assess program, assess trends, identify exceedances and hot spots, source ID, etc...)
- Conducting regular sediment sampling, including biology, toxicology, and chemistry
- Bioassessment (including reference stations)
- Develop study to monitor impacts from new development (including upstream reference stations)
- Sample just upstream of County line to determine mass emissions from Temecula and Murrieta
- Coordinate sampling stations with USGS gauging stations for accurate flow measurements, where possible
- They should install automated samplers where feasible

2.3.5 The City does not have a proactive or defined program to detect and eliminate illicit discharges and/or connections, it is primarily complaint-driven.

2.3.6 The City does not have the capacity to issue fines for spills. They can require the property owner to pay clean-up costs, but usually don't get involved in this.

2.4 Public Agency Activities

2.5.1 The City has a vactor truck and regularly cleans catch basins.

2.5.2 City streets are swept once a week, and this activity is contracted out.

2.5.3 Vehicle and equipment washing/rinsing may be occurring without appropriate BMPs in the municipal yard. Untreated wash water, or rinse water containing sediment or other pollutants, entering the MS4 would constitute an illicit discharge and a violation of Order No. 98-02, as well as a violation of the City's own ordinance. If vehicles and/or equipment are going to be washed or rinsed at the municipal yard, the City should install appropriate BMPs in a designated washing area to treat or contain wash water and other pollutants.

2.6 Industrial/Commercial Inspection Program

2.6.1 The City has begun to identify and prioritize their industrial/commercial facilities, and is working on a plan for a program to inspect those facilities that are not covered by the Compliance Assistance Program (CAP)[1].

2.6.2 The way the CAP is currently set up, the City is responsible for follow up and any necessary enforcement activities for facilities surveyed by County inspectors. However, the CAP does not seem to be working and needs improvement. It was not evident that the City had received any referrals for follow-up from the RCFCWCD.

2.7 Training

2.7.1 There seems to be an overall lack of specific NPDES/storm water training for City staff.

3 City of Murrieta

Evaluation conducted on Wednesday, November 20, 2002. Regional Board staff present included: Megan Fisher, Eric Becker and Chris Means. Copermittee staff present included: Bob Moehling, Russ Napier, Eugene Dieholz, Mike Brooks, and Ken Burris. Mark Wills from the RCFCWCD was also present.

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[1] The Compliance Assistance Program (CAP) includes storm water surveys conducted in conjunction with regular inspections, pursuant to other state regulations, of restaurant and food service facilities and facilities which generate, handle or store hazardous materials. Inspections are conducted by the Riverside County Health Services Agency/Environmental Health Department's Environmental Services Division and Hazardous Materials Management Division. Survey forms from each inspection are sent to the RCFCWCD for distribution to the appropriate municipality for follow-up.

PROGRAM EVALUATION/ASSESSMENT OF CONTROLS

Requirements (according to Section 10 of the permit application):
Section 10 of the permit application states that the effectiveness of the storm water program will be assessed on at least the following four levels:

- Extent of implementation of BMPs;
- Indirect quantitative measures;
- Indicators of public awareness; and
- Water quality monitoring.

Among other activities, the application also states that telephone surveys will be conducted to measure public awareness, and that the numbers of Notices of Intent for the statewide general industrial and construction storm water permits will be evaluated.

Compliance:
The Annual Report does not include any of the evaluations mentioned above.

Report Prepared By: Megan Fisher 4-16-02
Megan Fisher, Environmental Scientist Date

Report Reviewed By: Bob Morris 4-16-02
Bob Morris, Supervisor Date

MS4 Program Evaluation Report

Regional Board Order No. 98-02, Waste Discharge Requirements and NPDES Permit No. CAS0108766 for Riverside County in the San Diego Region

File No. 10-7004.02

Report Prepared By: Megan Fisher 12-11-02

Megan Fisher, Environmental Scientist
Northern Watershed Protection Unit
Date

Report Reviewed By: Robert Morris 12-11-02

Robert Morris, Chief
Northern Watershed Protection Unit
Date

1 Scope and Purpose of Evaluation

Beginning November 19, 2002, San Diego Regional Water Quality Control Board (Regional Board) staff conducted a review of the municipal storm water programs being implemented pursuant to Regional Board Order No. 98-02, Waste Discharge Requirements and NPDES Permit No. CAS0108766 for Urban Runoff from the Riverside County Flood Control and Water Conservation District (RCFCWCD), the County of Riverside, and the Cities of Murrieta and Temecula within the San Diego Region. Regional Board staff met with Copermittee staff in the office and in the field to discuss current activities. The purpose of the review was to determine the status of each Copermittee's program. Staff identified the following findings during the review. This is not intended to be an all-inclusive list of current activities, it is focused on items that were discussed during the review.

2 City of Temecula

Evaluation conducted on Tuesday, November 19, 2002. Regional Board staff present included: Megan Fisher, Eric Becker, and Chris Means. City staff present included: Bill Hughes, Jerry Alegria, Joe Stone, Ron Parks, Jack Hodson, and Brad Buron. Howard Windsor, from the State Department of Fire, and Linda Garcia from the RCFCWCD were also present.

2.1 Program Management

2.1.1 The City has hired an NPDES inspector, who oversees the implementation of erosion and sediment control BMPs at all construction sites.

2.1.2 The City is in the process of hiring an associate engineer whose foremost responsibility will be implementing the storm water program.

2.1 Development Planning

ADDITIONAL REPORTING REQUIREMENTS FOR RIVERSIDE COUNTY, SANTA MARGARITA WATERSHED MS4 PERMIT (ORDER NO. 98-02)

Permittees shall provide the following information in future annual reports for Order No. 98-02:

1 Fiscal Resources

1.1 Describe the funding source used to implement the requirements of Order 98-02.

1.2 Complete the following table for storm water management activities performed by your agency, to the extent that you have accurate information.

Program Element	Expenditures in previous fiscal year	Estimated expenditures for next fiscal year
1. Program management		
2. Education and Outreach		
3. Industrial/Commercial Inspections		
4. New and redevelopment Planning		
5. Construction a. Inspections		
6. Public Agency Activities a. Maintenance of BMPs b. Street sweeping c. Catch basin cleaning d. Trash collection/recycling e. Capitol costs		
7. IC/ID Program		
8. Monitoring		
9. Other		
10. TOTAL		

attached this document, *Specifications for Updating the Storm Water Management Program for the Santa Margarita Watershed in Riverside County for the Renewal of Order No. 98-02,* to this letter.

If you have any questions or comments regarding the attached report, please contact Megan Fisher at (858) 268-5363. We look forward to working with you and your staff in the future.

Respectfully,

Robert Morris

Robert Morris, Chief
Northern Watershed Protection Unit

File No. 10-7003.02, 10-7004.02, 10-7005.02, and 10-7006.02

Enclosures:
MS4 Program Evaluation Report
Specifications for Updating the Storm Water Management Program for the Santa Margarita Watershed in Riverside County for the Renewal of Order No. 98-02

CC: U.S. Environmental Protection Agency, Region IX, Eugene Bromley
U.S. Environmental Protection Agency, Region IX, Mary Butterwick
U.S. Environmental Protection Agency, Region IX, Ellen Blake
Santa Ana Regional Water Quality Control Board, Keith Elliot

2 Public Agency Activities

2.1 The number of catch basins your agency owns and operates and the frequency the catch basins are cleaned.

2.2 Typical BMPs implemented at public vehicle maintenance facilities, storage yards, and corporation yards.

2.3 The frequency and rationale for designating streets as priority for increased street sweeping.

2.4 Describe the procedures for implementing BMPs at public construction sites that are less than 5 acres in size.

2.5 The number of active public construction sites and the number that were covered by the General Construction Activities Storm Water Permit.

3 Discharge Control

3.1 Legal authority to satisfy all requirements in 40 CFR 122.26(d)(2)(I)(A-F). Cite the ordinance or code.

3.2 The total length of storm drains owned and operated.

3.3 A description of any efforts to identify illicit connections or discharges since the reconnaissance study conducted in 1995.

3.4 The total number of illicit discharges or connections reported and/or identified last year.

3.5 The total number your agency investigated in the last year.

3.6 The number that conveyed exempt discharges or NPDES permitted discharges.

3.7 The number that were terminated.

3.8 The number that resulted in enforcement actions.

3.9 Describe the types of enforcement actions.

3.10 A description of how illicit discharges or connections were identified and the number that were indicated by results from the monitoring program.

3.11 Describe your agency's spill response procedures.

California Regional Water Quality Control Board
San Diego Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb9/
9174 Sky Park Court, Suite 100, San Diego, California 92123
Phone (858) 467-2952 • FAX (858) 571-6972

Gray Davis
Governor

December 11, 2002

Mr. Steve Stump
Riverside County Flood Control
and Water Conservation District
1995 Market Street
Riverside, CA 92501

Mr. Gerald Alegria
City of Temecula
43174 Business Park Drive
P.O. Box 9033
Temecula, CA 92589

Mr. Bob Moehling
City of Murrieta
26442 Beckman Court
Murrieta, CA 92562

Ms. Kathy Gifford
County of Riverside
4080 Lemon Street, 12th Floor
Riverside, CA 92501

Dear MS4 Copermittees:

SUBJECT: Riverside County (Santa Margarita Watershed) MS4 Program Evaluation Report (Order No. 98-02, NPDES Permit No. CAS010766

Thank you for your time and cooperation during the evaluation of your municipal storm water management programs, conducted November 19-25, 2002. We appreciated the opportunity to discuss current activities with you and your staff. The information presented regarding your structures and the status of your storm water management programs will be very helpful during the permit renewal process, beginning next May. Please see the attached *MS4 Program Evaluation Report* for specific findings and feel free to provide additional information to clarify any item.

Furthermore, feel free to contact us if you would like direction on the development of your application for a new permit, or Report of Waste Discharge (ROWD). As previously mentioned, we anticipate that the new permit will be similar to those recently adopted for San Diego County (Order No. R9-2001-01) and Orange County (Order No. R9-2002-0001). We recommend that you review these documents, as well as the San Diego County Model Standard Urban Storm Water Management Program (SUSMP), to prepare for anticipated future requirements. These documents can be downloaded from the San Diego Regional Water Quality Control Board (Regional Board) web page at the following address: http://www.swrcb.ca.gov/rwqcb9/. We recommend that you develop a program consistent with the anticipated new requirements as part of your ROWD. In our letter, dated July 19, 2002, we provided a document that contains minimum specifications that we consider necessary to develop a comprehensive storm water management program, which should be part of your application. For your convenience, we've

3.12 Identify your agency's hotline number for reporting spills and illegal dumping.

3.13 The number of times your agency's hotline was called last year.

3.14 The number of trash receptacles your agency provides in public areas within its jurisdiction.

3.15 Describe public education activities pertaining to illicit connections and illegal discharges that your agency conducted last year.

3.16 Describe public employee training activities relative to eliminating illicit connections and discharges that occurred last year.

4 Industrial/Commercial Facilities Program

4.1 Submit a prioritized list of facilities within your jurisdiction which discharge storm water associated with industrial activities as defined at 40 CFR 122.26(b)(14). The list shall also include non-industrial facilities, or categories of facilities, that may discharges significant quantities of pollutants in storm water. The overall list shall be prioritized to indicate the individual sources, or categories of sources, that have the highest potential to contribute to storm water pollution. To prioritize, Permittees shall consider (1) the type of industrial activity (SIC code); (2) materials used in the industrial processes; (3) wastes generated; (4) pollutant discharge potential; (5) non-storm water discharges; (6) size of facility; (7) proximity to receiving water bodies; (8) sensitivity of receiving water bodies; (9) whether the site is subject to the statewide general industrial activities storm water permit; and (10) any other relevant factors.

4.2 The number of inspections of industrial/commercial facilities that your agency conducted last year. If all inspections are conducted by the Principal Permittee, provide the number conducted in each Permittee's jurisdiction.

4.3 Describe how storm water issues are addressed during inspections.

4.4 Attach a copy of the form used during inspections of industrial/commercial facilities.

4.5 The number and type of enforcement actions that resulted from industrial/commercial inspections last year.

4.6 The number of referrals to the Regional Board, or other local departments that occurred as a result of industrial/commercial inspections last year.

5 Construction

5.1 The number of building/grading permits that your agency issued last year.

5.2 Describe how your agency ensures that appropriate BMPs are implemented at construction sites, including sites less than 5 acres in size.

5.3 Describe standard mitigation measures that your agency requires to be implemented at construction sites.

5.4 The number of inspections of construction sites that your agency conducted last year.

5.5 The number of follow-up inspections your agency conducted last year.

5.6 Describe your agency's procedures for inspecting construction sites, include any size thresholds or regular frequencies.

5.7 Describe the number and type of enforcement actions that resulted from inspection of construction sites last year.

5.8 Describe how your agency ensures proof of a site's coverage under the statewide general construction activities storm water permit prior to issuing a grading permit.

5.9 Describe all employee training efforts related to construction storm water that your agency conducted last year.

6 New Development

6.1 Describe the process your agency uses to implement the Supplement A guidelines, include any exemptions based on project size or type.

6.2 Describe the process your agency uses to determine appropriate BMPs for projects.

6.3 The number of projects your agency conditioned with BMP requirements from Supplement A last year.

6.4 Submit an example of a project plan that your agency conditioned with post-construction BMPs from Supplement A last year.

6.5 Describe how your agency requires storm water BMPs for projects that are considered ministerial under CEQA.

7 Monitoring Program

7.1 Describe the monitoring program's progress towards meeting each of the following goals (as stated in the Consolidated Program for Water Quality Monitoring, 1994):

24.	Monitoring in 2001-2002 is inadequate: • No storm water samples were collected during the 2001-2002 reporting year (or during the 2000-2001 reporting year). Although it was a dry year, the report documented several rain events between November and April that could have been sampled. There is no explanation for not sampling these events. • Average values must be calculated at each sampling location, not averaged for the entire watershed. This does not allow for source identification, comparison between sites, or identification of problem areas. • Averages of all data from all sampling locations from 1993 to 2002 does not show trends or improvements. It is impossible to assess program effectiveness with this information. • Pollutants of concern have still not been identified. Many of the sampling parameters could be eliminated if the data were properly assessed. • The dry weather data still has not been used to identify illicit connection or discharges (the Annual Report states that this is the purpose of the sampling). • The raw data cannot be assessed in the form that it was submitted. The parameters are unclear and the graphs are not described.	Need to develop and implement an improved monitoring program as soon as possible.

- Assessment of mass loadings from storm drains
- Assess influence of land use on water quality
- Verification and control of illicit discharges
- Compliance monitoring of water quality
- Assess effectiveness of various urban practices designed to control pollution
- Identify problem areas and/or trends
- Establish database for future reference
- Identify baseline conditions
- Identify pollutants of concern

7.2 All data collected in the previous reporting year must be submitted as individual concentrations for each sampling event, including the units, laboratory detection limits, reporting limits, and analytical methods used for each.

7.3 All data must be compared to appropriate water quality standards (from the Basin Plan and the California Toxics Rule). Data that exceed applicable standards shall be highlighted.

7.4 Describe the method used to measure flow and calculate mass emissions.

7.5 Describe the number and types of toxicity tests that have been done and their results.

7.6 Identify pollutants of concern, based on all existing data. Constituents that cause or could contribute to exceedances of water quality standards should be considered pollutants of concern.

7.7 Evaluate potential sources of pollutants of concern based on land uses, industrial activities, and other possible sources in the drainage area.

7.8 Summarize and interpret the cumulative findings of all previous monitoring.

7.9 Identify detectable trends in water quality data and receiving water quality, based on the cumulative previous monitoring findings.

7.10 Identify water quality improvement or degradation.

7.11 Provide recommendations for improvements to the storm water management program based on the monitoring results.

7.12 Provide recommendations for future monitoring activities.

19.	This section of Temecula's report seems to discuss construction BMPs, not post-development BMPs. There is a reference to a construction note that requires fossil filters in storm drains; however, we are aware through the 401 program that the City will not even allow these types of BMPs on City property, much less require them. We realize the City's concerns about maintenance responsibilities; however, this issue needs to be discussed and resolved prior to the issuance of a new permit with specific post-development BMP requirements.	More information is needed to determine the status of this program. The issue of post-development BMPs on public property should be discussed.
20.	Murrieta provides a good description of a program, but again, there is no evidence that this program has been implemented, or that any projects have been conditioned with the listed post-construction BMPs. Although the described program would meet the requirements of the current MS4 permit, it would need more specific language and requirements to be adequate for anticipated new permit requirements. For example, requiring treatment control BMPs "as appropriate" does not guarantee that they will be implemented. A program that will ensure the implementation of BMPs at all priority development sites (as described in the guidance attached to our letter dated July 19, 2002) should be developed by all Permittees.	More information is needed to confirm the status of Murrieta's current program. Specific new development requirements in the next permit would clarify how the Permittees should be implementing their programs to ensure that pollutants in discharges from new developments are reduced to the maximum extent practicable.
21.	Much of the problem with this program stems from weak and non-specific permit requirements. Supplement A is vague and inadequate to protect water quality from impacts of new development. It does not contain specific BMP requirements for project types or sizes, making it unenforceable. None of the BMPs listed provide treatment. Supplement A will not be adequate when the new permit is adopted.	Specific new development requirements, including design standards and priority development categories, in the next permit would clarify how the Permittees should be implementing their programs to ensure that pollutants in discharges from new developments are reduced to the maximum extent practicable.
22.	According to the Annual Report, ministerial projects are currently not conditioned in accordance with Supplement A. Permittees should begin considering how ministerial projects will be addressed, because under the new permit, all priority development categories will have to incorporate post-development BMPs, regardless if they are ministerial or discretionary under CEQA.	Inform the Permittees of this issue so they can take the necessary steps to condition ministerial projects with new development requirements when the next permit is adopted.
	Monitoring Program	
23.	The monitoring report did not comply with the CWC § 13267 request for information: • Still no comparisons of monitoring data to water quality standards • Mass emissions have not been tracked • No data analysis • No program assessment • No identification of sources, problem areas, degradation or improvement, or pollutants of concern	Need to develop and implement an improved monitoring program as soon as possible.

11.	Murrieta describes a good program, but does not provide quantitative information or describe what they did during the past year. It sounds like they are describing a proposed program that has not been implemented yet, but this is not clear. However, they report doing annual video inspections.	More information is needed to determine the current status of Murrieta's program
12.	It seems that Temecula does not proactively check for illicit discharges or connections. Permittees should not depend on the current monitoring program to detect illicit discharges and connections.	More specific requirements for the IC/ID program in the next permit would clarify the activities that Permittees should be conducting.
	Construction Inspections	
13.	The County of Riverside has increased their oversite of construction sites and provided good documentation in response to the 13267 request for information.	Commend the County of Riverside on their increased oversite of construction sites and recommend that they develop a model program for the other Permittees to implement.
14.	Murrieta and Temecula did not provide specific numbers of inspections or follow-up, indicating that these efforts have not been regularly tracked. This is not a permit requirement, but the Permittees should begin documenting their activities for future reporting.	More information is needed to verify program status. More specific reporting requirements in the next permit would clarify program status.
15.	Murrieta provides a good description of a construction inspection program, but it does not seem to be what they are currently doing. It would be more appropriate for the proposed program to be included in the ROWD for the new permit. The Annual Report should include the status of the current program and the last year's activities. It doesn't say how many, if any, inspections were conducted, and whether or not any enforcement actions were taken.	More information is needed to clarify the status of Murrieta's program. More specific reporting requirements in the next permit would clarify program status.
16.	According to the Reporting Forms, Murrieta nor Temecula have a construction storm water inspection form or checklist, which implies that they have not yet implemented the described program, and may not specifically check for storm water issues during inspections.	More information is needed to determine how Murrieta and Temecula address storm water issues during inspections.
17.	Temecula employees did not attend any training last year.	More specific training requirements in the next permit would clarify what type and frequency of training employees should have.
	New Development	
18.	None of the Permittees gave examples of BMP requirements and numbers of projects conditioned. There is no evidence that post-construction BMPs from Supplement A are ever required.	More information is needed to determine the status of the new development programs. Specific new development requirements in the next permit would clarify how the Permittees should be implementing their programs to ensure that pollutants in discharges from new developments are reduced to the maximum extent practicable.

California Regional Water Quality Control Board

San Diego Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb9/
9174 Sky Park Court, Suite 100, San Diego, California 92123
Phone (858) 467-2952 • FAX (858) 571-6972

Gray Davis
Governor

CERTIFIED MAIL NO._____(RETURN RECEIPT REQUESTED)

July 19, 2002

Mr. David Zappe
Riverside County Flood Control
and Water Conservation District
1995 Market Street
Riverside, CA 92501

Mr. John Pourkazemi
City of Temecula
43174 Business Park Drive
P.O. Box 9033
Temecula, CA 92589

Mr. Jim Miller
City of Murrieta
26442 Beckman Court
Murrieta, CA 92562

Ms. Kathy Gifford
County of Riverside, Executive Office
4080 Lemon Street, 12th Floor
Riverside, CA 92501

Dear Copermittees:

SUBJECT: APPLICATION FOR RENEWAL OF MS4 NPDES PERMIT No. CAS0108766

As you are aware, the existing Municipal Separate Storm Sewer System (MS4) NPDES Permit (Order 98-02) for the Santa Margarita Watershed in Riverside County expires on November 30, 2003, and a new application must be submitted by May 31, 2003 (pursuant to the Code of Federal Regulations [40 CFR 122.21]). In accordance with EPA policy, the application should consist of a revised storm water management program (SWMP) and monitoring program. The proposed SWMP must be able to control pollutants in storm water discharges to the maximum extent practicable (MEP). The purpose of this letter is to provide direction for revising your SWMP and monitoring program.

The attached document contains the minimum specifications that we consider necessary to develop a comprehensive SWMP that will meet the MEP standard and will be consistent with the anticipated new permit requirements. The specifications are based on the federal application requirements [40 CFR 122.26(d)] and on recent precedent-setting Regional Board and State Board decisions, including the adoption of improved MS4 permits for San Diego County (Order No. R9-2001-01) and Orange County (Order No. R9-2002-0001). When developing your SWMP, please keep in mind that the information requested in the attached specifications should allow your SWMP to, at a minimum, meet the following fundamental objectives:

- Identify the primary contributors of pollutants in storm water discharges from the MS4 and their locations in relation to receiving waters.

	facilities that discharge storm water associated with industrial activity. The current Industrial/Commercial Facilities Program, as described in the Annual Report is a good way to use an existing program to address storm water and meet permit requirements. However, there may be industrial facilities that do not fall into the categories of Food Facilities or Hazardous Waste/Hazardous Materials Facilities that must also be inspected.	
6.	The inspection forms should include questions verifying facilities' coverage under the statewide general industrial permit and the presence and implementation of a SWPPP.	Nonfilers need to be identified.
7.	The Riverside County Flood Control & Water Conservation District (RCFC&WCD) failed to address the Industrial/Commercial Facilities Program questions. They stated that the section will be covered in the Report of Waste Discharge for the permit renewal. This implies that there is currently no program to describe.	More information is necessary to determine the status of this program.
	Illicit Connection/Illicit Discharge Program	
8.	The Discharge Control Program still seems to be nonexistent. RCFC&WCD still depends on the Reconnaissance Survey of Storm Drains that was completed in 1994, in accordance with the first MS4 permit. This survey was conducted on approximately 34 miles of storm drains. Today, the RCFC&WCD owns and operates 70.4 miles of storm drains. It is inappropriate to continue to use the old survey as justification for not having a proactive IC/ID program.	More specific requirements for a proactive illicit discharge/illicit connection elimination program should be included in the next permit. More information is needed to determine program status.
9.	RCFC&WCD reported one illegal discharge for dumping tree limbs along Anza Channel. However, in Section 3 of the Annual Report, the RCFC&WCD reported that the IC/ID program has expanded and that field staff are reporting illegal dumping more frequently than in the past. This reporting is inconsistent and verifies that the reporting forms do not provide accurate or sufficient information.	More information is needed to determine how the RCFC&WCD handles and reports discharges and dumping.
10.	The County reported that Code Enforcement is the central clearinghouse for reports of illegal discharges, and that approximately 60 illicit discharges in the Santa Margarita watershed were reported to Code Enforcement staff. The Annual Report states that the County Fire Department's HAZMAT team responded to 122 spills or dumping incidents that involved or threatened an MS4 or waterbody. It is unclear if the HAZMAT report is for the entire County and whether or not HAZMAT's reported spills overlap with Code Enforcement's.	More information is needed to clarify program status.

3.	The introduction to the Annual Report (page I-4) states that the Permittees lack legal jurisdiction over storm water discharges into their MS4s from agricultural activities, California and federal facilities, utilities and special districts, Native American tribal lands, wastewater management agencies, and other point and non-point source discharges otherwise permitted by or under the jurisdiction of the Regional Board. Similarly, certain activities that generate pollutants present in urban runoff are beyond the ability of the Permittees to eliminate. Examples of these include operation of internal combustion engines, atmospheric deposition, brake pad wear, residues from lawful application of pesticides, nutrient runoff from agricultural activities, and leaching of naturally occurring minerals from local geography.	These statements are not entirely accurate. As operators of MS4s, the Permittees cannot passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to the waters of the U.S., the operator of an MS4 that does not prohibit and/or control discharges into its system essentially accepts responsibility for those discharges. Certain non-storm water discharges, including irrigation water, are not required to be prohibited from entering the MS4. Also, Permittees may lack legal jurisdiction over some federal, state, regional, and local entities that discharge to the MS4s within the Permittees' jurisdiction. However, if these discharges cause or contribute to an exceedance of water quality standards when discharged from the MS4, this would constitute a violation. Further, the Federal Register (Vol. 64, No. 235, Pg. 68727) states that sources of illicit discharges include, but are not limited to: sanitary wastewater; effluent from septic tanks; car wash, laundry, and other industrial wastewaters; improper disposal of auto and household toxics, such as used motor oil and pesticides; and spills from roadway and other accidents. An example used in the Federal Register is infiltration into the MS4 from cracked sanitary sewer systems. The focus of the MS4 program is on the control of urban runoff pollutants and flows, which are either generated or accelerated by human activities. It is not meant to control background or naturally occurring pollutants and flows. Therefore, pollutants that must be controlled include, but are not limited to, those from the operation of internal combustion engines, break pad wear, and residues from pesticide application. Permittees are not expected to control the leaching of naturally occurring minerals.
	Industrial/Commercial Facilities Program	
4.	None of the Permittees have submitted a list of facilities which discharge storm water associated with industrial activity as defined at 40 CFR 122.26(b)(14), and other facilities that may discharge significant quantities of pollutants in storm water. Appendix 1, Part D of Order No. 98-02 requires this list to be submitted and updated annually. This violation was identified in previous correspondence from this office to the Permittees. Also, our 13267 letter, dated April 17, 2002, specifically requested that each Permittee submit a prioritized list of facilities, as required in Order No. 98-02. Riverside County did submit a list, but it is not prioritized as required, and may not include the appropriate facilities.	The Permittees continue to be in noncompliance with Appendix 1, Part D of Order No. 98-02, and have provided an incomplete response to the CWC § 13267 directive, dated April 17, 2002.
5.	The inspection program conducted by the County Hazardous Material Division and the District Environmental Health Services Division does not appear to target industrial facilities, as defined at 40 CFR 122.26(b)(14). Inspections must be conducted at those	Additional information is needed to determine how storm water issues at industrial and commercial facilities are being addressed.

- Evaluate the magnitude of the pollutant sources and their potential impact on receiving waters.
- Describe how the municipality will reduce or eliminate the contribution of pollutants in storm water discharges or prevent the damaging influences of these discharges.
- Justify the municipality's proposed activities and best management practices (BMPs).
- Provide a timeline for implementation of the proposed program.
- Assess program effectiveness using performance measures and other criteria.
- Describe the funding source for the proposed program activities.

Upon receipt of the application, we will review it for consistency with the attached specifications, and we will consider all of the proposed management programs when developing permit conditions to reduce pollutants in discharges to the MEP in your municipalities.

We look forward to working with you on the development of your permit application and its components, and we encourage you to contact us for assistance. If you would like to arrange workgroup meetings, or have any questions, contact Megan Fisher, at (858) 268-5363, or via email at fishm@rb9.swrcb.ca.gov.

Respectfully,

JOHN H. ROBERTUS
Executive Officer

JHR:rwm:mbf

File No. 10-7000.03

Enclosures:
Specifications for Updating the Storm Water Management Plan for the Santa Margarita Watershed in Riverside County for the Renewal of Order No. 98-02

CC: U.S. Environmental Protection Agency, Region IX, Eugene Bromley

San Diego Regional Water Quality Control Board Staff Review of the Riverside County, Santa Margarita Watershed MS4 2001-2002 Annual Report (Order No. 98-02, CAS0108766)

File No. 10-7004.02

Report Prepared By: Megan B. Fisher 11-6-02

Megan Fisher, Environmental Scientist — Date
Northern Watershed Protection Unit

Report Reviewed By: 11/6/02

Michael P. McCann — Date
Supervising Water Resource Control Engineer

	FINDINGS	CONCLUSIONS
	Annual Reporting	
1.	As noted in our comments on the 2000-2001 Annual Report, the reporting forms do not provide quantitative information and do not adequately describe the status of program implementation. Much of the text in the report is duplicative of previous annual reports and only provides a general description of programs with no new information. The purpose of the Annual Report is to document the status of program implementation and effectiveness, identify water quality improvement or degradation, and to describe activities that occurred during that reporting year.	Additional information is needed to determine the status of Permittees' storm water management programs. More specific reporting requirements will be recommended for inclusion in the next MS4 permit.
2.	Each Permittee made an effort to answer the questions in Attachment 2 of our California Water Code (CWC) section 13267 letter. In particular, the County of Riverside specifically addressed each question and provided an explanation for items that were not applicable. These responses provided much more useful information about program status than the reporting forms in the Annual Report. However, some programs were still not adequately described by each Permittee. Although some items may not be applicable to all Permittees, a lack of information suggests that some programs are not being implemented.	Additional information is needed to determine the status of Permittees' storm water management programs.

g. Pollutants of concern have not been identified as part of the annual reports for Order No. 98-02.

Alleged Violation No. 3

7. The Regional Board § 13267 directive, issued on April 17, 2002, directed Permittees to submit specific information about the monitoring program, including but not limited to:
   a. All data must be compared to appropriate water quality standards (from the Basin Plan and the California Toxics Rule). Data that exceed applicable standards shall be highlighted.
   b. Identify pollutants of concern, based on all existing data. Constituents that cause or could contribute to exceedances of water quality standards should be considered pollutants of concern.
   c. Evaluate potential sources of pollutants of concern based on land uses, industrial activities, and other possible sources in the drainage area.
   d. Summarize and interpret the cumulative findings of all previous monitoring.
   e. Identify detectable trends in water quality data and receiving water quality, based on the cumulative previous monitoring findings.
   f. Identify water quality improvement or degradation.
   g. Provide recommendations for improvements to the storm water management program based on the monitoring results.
   h. Provide recommendations for future monitoring activities.

8. The Permittees did not provide an adequate response to the items listed above in Finding No. 7. Page 8 of the District's response states that they did not have time to analyze data. This does not constitute an adequate response.

Questions pertaining to the issuance of this Notice of Violation should be directed to Megan Fisher at (858) 268-5363. If you feel you received this Notice in error or need clarification on any of the above violations please contact our office immediately.

Written correspondence pertaining to this Notice should be directed to the following address:

Michael P. McCann
Supervising Engineer
Attn: Eric Becker
California Regional Water Quality Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Michael P. McCann
Supervising Water Resource Control Engineer

Nov. 6, 2002
DATE

d) Residential Component

i) A completed inventory of high priority residential areas and activities. At a minimum, high priority areas and activities include:

(a) Automobile repair and maintenance;
(b) Automobile washing;
(c) Automobile parking;
(d) Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
(e) Disposal of household hazardous waste;
(f) Disposal of green waste;
(g) Any other residential source that the Copermittees determine may contribute a significant pollutant load to the MS4;
(h) Any residence within or directly adjacent to or discharging directly to an ESA; and
(i) Any residence tributary to a Clean Water Act Section 303(d) impaired water body, where the residence generates an impairing pollutant.

ii) A description of specific pollution prevention, source control, and treatment control BMPs to reduce pollutants to the MEP from high priority residential areas that are to be implemented during the life of the permit, accompanied with a proposed schedule for implementing the BMPs and a description of how they will be required.

e) Development Planning Component

A description of planning procedures including a comprehensive master plan to develop, implement, and enforce controls to reduce the discharge of pollutants from new development and significant redevelopment[5] project sites to the MEP. Such plans shall include on-site controls to reduce pollutants in storm water runoff after construction is completed and the process by which each Copermittee will require such controls prior to project approval and issuance of local permits. These procedures should include:

i) A workplan for the inclusion of water quality and watershed protection principles and policies in each Copermittee's General Plan. Examples of principles and policies to be considered include:

(a) Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible slow runoff and maximize on-site infiltration of runoff.
(b) Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants off site and into an MS4.
(c) Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas.

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[5] Significant redevelopment means the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria described in Section e.iii.3 applies only to the addition, and not to the entire development.

Environmental Services Division. This list is not prioritized and it is not clear that this list includes all facilities required in Appendix 1, Part D of Order No. 98-02.

4. On May 7, 2002, the City of Temecula submitted a late 2000-2001 Annual Progress Report, in response to a Notice of Violation and Request for Technical Report from the Regional Board, dated April 10, 2002. Page 5 of the City's response states "The list of facilities within City of Temecula which discharge storm water associated with industrial activity has not been prepared hence not provided."

Alleged Violation No. 2

5. Part I, Section A, Requirement No. 4 of the NPDES Permit states that the Permittees shall implement the storm water monitoring program described in the "NPDES Municipal Stormwater Application for Permit Renewal, Santa Margarita Watershed", dated January 17, 1995, and in the "Consolidated Monitoring Program for Water Quality Monitoring", dated October 1994. According to these documents, the program includes, but is not limited to, the following objectives:

   a. Assessment of mass loadings from storm drains.
   b. Assess influence of land use on water quality.
   c. Compliance monitoring of water quality.
   d. Assess effectiveness of various urban practices designed to control pollution.
   e. Identify problem areas and/or trends.
   f. Identify baseline conditions.
   g. Identify pollutants of concern.

6. Based on the following findings, the Permittees have failed to implement measures to achieve the objectives listed above:

   a. Page 8 of the District's response to the § 13267 directive states that mass emissions have not been tracked in the past.
   b. No land use analysis was included in the 2000-2001 or the 2001-2002 Annual Report.
   c. No wet weather samples were taken in the 2000-2001 or the 2001-2002 reporting years, and no data has been compared to water quality standards as part of the annual reports for Order No. 98-02. According to page 14 of the Consolidated Program for Water Quality Monitoring, 3 sites will be sampled during wet weather 3 times per year.
   d. No analyses of various urban practices designed to control pollution have been included in the annual reports for Order No. 98-02.
   e. No problem areas or trends have been identified in the annual reports for Order No. 98-02.
   f. Baseline conditions have not been identified in the annual reports for Order No 98-02.

(d) Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.
(e) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. Require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads and flows.
(f) Avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.
(g) Reduce pollutants associated with vehicles and increasing traffic resulting from development.
(h) Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable.

ii) A plan to include the following development project requirements in local permits:

(a) Require project proponent to implement source control BMPs for all applicable development projects.
(b) Require project proponent to implement site design/landscape characteristics where feasible, which maximize infiltration, provide retention, slow runoff, and minimize impervious land coverage for all development projects.
(c) Require project proponent to implement buffer zones for natural water bodies, where feasible. Where buffer zone implementation is infeasible, require project proponent to implement other buffers such as trees, lighting restrictions, access restrictions, etc.
(d) When land-use is known to be industrial, require industrial applicants subject to the GIASP, to provide evidence of coverage under the GIASP.
(e) Require project proponent to ensure its grading or other construction activities meet the provisions specified in Section F.2. of this Order.
(f) Require project proponent to provide proof of a mechanism which will ensure ongoing long-term maintenance of all structural post-construction BMPs.
(g) Require projects to be designed to control post-development peak storm water runoff discharge rates, velocities, and duration to prevent accelerated stream erosion and to protect stream habitat (i.e., mimic pre-development hydrology).

iii) A proposed standard urban storm water mitigation plan (SUSMP), including an implementation schedule, to reduce pollutants and runoff flows on site from all new development and significant redevelopment projects falling under the following priority project categories:

(a) *Commercial, industrial, or residential developments that create one acre (43,560 square feet) or more of impervious surface, including roof area, streets and sidewalks.* This category includes any development of any type on public or private land, which falls under the planning and building authority of the Copermittees, where one acre or more of new impervious surface, collectively over the entire project site, will be created.
(b) *Automotive repair shops.* This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.
(c) *Restaurants.* This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment

ALLEGED VIOLATIONS

1. Failure to develop a prioritized list of facilities which discharge storm water associated with industrial activity as required by Appendix 1, Part D of the NPDES Permit.

2. Failure to implement the storm water monitoring program as specified by Part I, Section A, Requirement No. 4 of the NPDES Permit.

3. Failure to submit a complete response to the April 17, 2002 Regional Board § 13267 directive to include additional reporting requirements in future annual reports.

STATEMENT OF FACTS IN SUPPORT OF ALLEGATIONS

Alleged Violation No. 1

1. Appendix 1, Part D of the NPDES Permit states: *The permittees shall develop, and update annually, at a minimum, a list of facilities within the jurisdiction of the permittees which discharge storm water associated with industrial activity as defined at 40 CFR 122.26(b)(14). The list shall also include non-industrial facilities, or categories of facilities which the permittees believe may discharge significant quantities of pollutants in storm water. The overall list shall be prioritized to indicate the individual sources which the permittees believe are the most significant sources of pollutants.*

2. On April 17, 2002, the Regional Board issued a directive, pursuant to CWC § 13267, requiring the Permittees to include additional specific information in future annual reports, including a list of industrial facilities as required by Appendix 1, Part D of Order No. 98-02. The 2001-2002 Annual Report, dated September 15, 2002, includes a submittal from each Permittee that addresses the Regional Board § 13267 directive, dated April 17, 2002.

3. In the Annual Report, the Permittees acknowledged that the list of facilities required by Appendix 1, Part D has not been developed. Section 8 of the City of Temecula's response, in Appendix C of the Annual Report, states that the list will be prepared and provided, with no indication of when or why the list has not been developed. Page 12 of the City of Murrieta's response, in Appendix C of the Annual Report, states that the Industrial/Commercial Facilities Program is implemented and directed by the Riverside County Flood Control Division. Page 4 of the District's response to the April 17, 2002 Regional Board directive states that information regarding the Industrial/Commercial Facilities Program will be covered in detail in the Report of Waste Discharge as part of the permit renewal application. Page 4 of the County of Riverside's response, in Appendix C of the Annual Report, states that the only listing available at this time is a list of facilities that were surveyed by the Hazardous Material Division and the District

stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet.

(d) *All hillside development greater than 5,000 square feet.* This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

(e) *Environmentally Sensitive Areas.* All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter receiving waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition.

(f) *Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.* Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

(g) *Street, roads, highways, and freeways.* This category includes any paved surface which is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

(h) *Retail Gasoline Outlets.* Retail Gasoline Outlet (RGO) is defined as any facility engaged in selling gasoline.

(2) The SUSMP should include a list of recommended source control and treatment control BMPs and require all new development and significant redevelopment projects falling under the above priority project categories or locations to implement a combination of on-site BMPs from the recommended list, including at a minimum (1) source control and (2) treatment control BMPs. The BMPs shall:

(a) Be located on site and designed to effectively treat the runoff from each specific site;

(b) Control the post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat;

(c) Conserve natural areas where feasible;

(d) Minimize storm water pollutants of concern in urban runoff from each specific new development or significant redevelopment (through implementation of appropriate source control BMPs). Identification of pollutants of concern should include, at a minimum, all pollutants for which water bodies receiving the development's runoff are listed as impaired under Clean Water Act section 303(d), all pollutants associated with the land use type of the development, and all pollutants commonly associated with urban runoff;

(e) Remove pollutants of concern from urban runoff (through implementation of effective structural treatment BMPs appropriate for treating the specific pollutants of concern from the site);

(f) Minimize directly connected impervious areas where feasible;

(g) Protect slopes and channels from eroding;

(h) Include storm drain stenciling and signage;

(i) Include properly designed outdoor material storage areas;

(j) Include properly designed trash storage areas;

California Regional Water Quality Control Board
San Diego Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb9/
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Phone (858) 467-2952 • FAX (858) 571-6972

Gray Davis
Governor

November 6, 2002

IN THE MATTER OF

Riverside County Flood Control and Water Conservation District; and
County of Riverside; and
City of Murrieta; and
City of Temecula

NOTICE OF VIOLATION NO. R9-2002-360

NPDES Permit No. CAS0108766
SDRWQCB Order No. 98-02

Subject Facilities: Municipal Separate Storm Sewer Systems

YOU ARE HEREBY NOTIFIED THAT:

The Riverside County Flood Control and Water Conservation District (District), the County of Riverside, the City of Murrieta and the City of Temecula (hereinafter Permittees) are in violation of waste discharge requirements contained in the Order No. 98-02, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108766, *Waste Discharge Requirements for Urban Runoff from the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County within the San Diego Region* and the California Water Code Section 13267 directive issued by the San Diego Regional Water Quality Control Board (Regional Board) on April 17, 2002.

Such violation subjects you to possible enforcement action by the Regional Board, including administrative enforcement orders requiring you to cease and desist from violations, or to clean up waste and abate existing or threatened conditions of pollution or nuisance; administrative or judicial proceedings for the assessment of civil liability in amounts of up to $10,000 per day; referral to the State Attorney General for injunctive relief; and, referral to the District Attorney for criminal prosecution.

The violations alleged in this Notice of Violation were identified in reviewing the 2001-2002 Annual Progress Report (Annual Report), dated September 15, 2002, submitted to address the requirements contained in Order No. 98-02 as modified by Regional Board to be consistent with the NPDES Permit No. CAS0108766 that was issued by the U.S. Environmental Protection Agency on April 27, 1999 and to address the reporting requirements specified in an April 17, 2002 Regional Board directive issued pursuant to California Water Code Section 13267.

(k) Include proof of a mechanism, to be provided by the project proponent or Copermittee, which will ensure ongoing long-term structural BMP maintenance;
(l) Include additional water quality provisions applicable to individual priority project categories;
(m) Be correctly designed so as to remove pollutants to the maximum extent practicable;
(n) Be implemented as close to the pollutant sources as practicable, and prior to discharging into receiving waters supporting beneficial uses; and
(o) Ensure that post-development runoff does not contain pollutant loads which cause or contribute to an exceedance of water quality objectives or which have not been reduced to the maximum extent practicable.

(3) The SUSMP should require treatment control BMPs with either volumetric or flow-based treatment control design standards to be implemented for all priority development projects. All treatment control BMPs should be located so as to infiltrate, filter, or treat the required runoff volume or flow from each priority project site prior to its discharge to any water of the State. Treatment control BMPs should be sized to comply with the following numeric or flow-based design criteria to mitigate (infiltrate, filter, or treat) storm water runoff:

Volume

Volume-based BMPs should be designed to mitigate (infiltrate, filter, or treat) either:

(a) The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record (0.6 inch approximate average for the San Diego County area);[6] or
(b) The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or
(c) The volume of annual runoff based on unit basin storage volume, to achieve 90% or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/Commercial, (1993); or
(d) The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event;[7]

OR

Flow

[6] The size of the 85th percentile storm event may vary over different Copermittee jurisdictions. The Copermittees are encouraged to calculate the 85th percentile storm event for each of their jurisdictions using local rain data pertinent to their particular jurisdiction (the 0.6 inch standard is a rough average for the County of San Diego and should only be used where appropriate rain data is not available). In addition, isopluvial maps may be used to extrapolate rainfall data to areas where insufficient data exists in order to determine the volume of the local 85th percentile storm event. Where the Copermittees will use isopluvial maps to determine the 85th percentile storm event in areas lacking rain data, the Copermittees shall describe their method for using isopluvial maps in the model and local SUSMPs.

[7] Under this volume criteria, hourly rainfall data may be used to calculate the 85th percentile storm event, where each storm event is identified by its separation from other storm events by at least six hours of no rain. Where the Copermittees may use hourly rainfall data to calculate the 85th percentile storm event, the Copermittees shall describe their method for using hourly rainfall data to calculate the 85th percentile storm event in the SUSMP.

Enclosures:
Staff Review of the Riverside County, Santa Margarita Watershed MS4 2001-2002 Annual Report (Order No. 98-02, CAS0108766)
Notice of Violation No. R9-2002-0360
Agenda for November 19-22, 2002 field evaluation

CC: U.S. Environmental Protection Agency, Region IX, Eugene Bromley
U.S. Environmental Protection Agency, Region IX, Mary Butterwick

Flow-based BMPs should be designed to mitigate (infiltrate, filter, or treat) either:

(a) The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or
(b) The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or
(c) The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

(4) Pollutants or Conditions of Concern - The SUSMP should include a procedure for identifying pollutants or conditions of concern for each new development or significant redevelopment project. The procedure should include, at a minimum, the identification of (1) receiving water quality (including pollutants for which receiving waters are listed as impaired under Clean Water Act section 303(d)); (2) land use type of the development project and pollutants associated with that land use type; (3) pollutants expected to be present on site; (4) changes in storm water discharge flow rates, velocities, durations, and volumes resulting from the development project; and (5) sensitivity of receiving waters to changes in storm water discharge flow rates, velocities, durations, and volumes.

(5) Implementation Process – The SUSMP should include a process by which each Copermittee will implement SUSMP requirements. The process should identify at what point in the planning process development projects will be required to meet SUSMP requirements. The process should also include identification of the roles and responsibilities of various municipal departments in implementing the SUSMP requirements, as well as any other measures necessary for the implementation of SUSMP requirements.

(6) Restaurants Less than 5,000 Square Feet - New development and significant redevelopment restaurant projects where the land area development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirement F.1.b.(2)(c) and peak flow rate requirement F.1.b(2)(b)(i). A restaurant is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

(7) Infiltration and Groundwater Protection – To protect groundwater quality, each Copermittee should apply restrictions to the use of structural treatment BMPs which are designed to primarily function as infiltration devices (such as infiltration trenches and infiltration basins). Such restrictions shall ensure that the use of such infiltration structural treatment BMPs shall not cause or contribute to an exceedance of groundwater quality objectives. At a minimum, use of structural treatment BMPs which are designed to primarily function as infiltration devices shall meet the following conditions:[8]

[8] These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

completeness of your actions to correct the noted violations in determining whether imposition of administrative civil liability pursuant to CWC sections 13268, 13385, and 13350 is warranted. Section 13268 states "(a) Any person failing or refusing to furnish technical or monitoring program reports...is guilty of a misdemeaner and may be liable civilly in accordance with Subdivision (b). Subdivision (b) states "Civil liability may be administratively imposed...in an amount which shall not exceed one thousand dollars ($1,000) for each day in which the violation occurs. Section 13350 states that any person in violation of any waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board . . . shall be liable civilly in accordance with subdivision (d) or (e). Subdivision (e) states "The state board or regional board may impose civil liability...(1) The civil liability on a daily basis may not exceed five thousand dollars ($5000) for each day the violation occurs...(B) When there is no discharge, but an order issued by the regional board is violated... the civil liability shall not be less than one hundred dollars ($100) for each day in which the violation occurs." If civil liability is imposed, it may begin from September 15, 2002, the date of the Annual Report.

We have concluded that the monitoring program, as it is being implemented, is insufficient and fails to meet its stated objectives. To address this deficiency, the Regional Board § 13267 directive, dated April 17, 2002, requested that you propose recommendations for future monitoring. To date, we have not received a proposal. Effective monitoring is an integral part of a storm water management program, necessary to characterize storm water discharges, assess program effectiveness, and determine areas of concern, among other things. To ensure that we do not further delay the implementation of adequate monitoring, I have directed my staff to prepare a technical change order, pursuant to CWC § 13267, that modifies the monitoring and reporting requirements in Order No. 98-02. The modified monitoring program will then be incorporated into the next proposed MS4 permit. Prior to its issuance, we will provide you with a draft of the modified monitoring program for your comments.

If you have any questions regarding this matter, please contact Ms. Megan Fisher at (858) 268-5363.

Respectfully,

JOHN H. ROBERTUS
Executive Officer

JHR:rwm:mef

File No. 10-7004.02

(a) Urban runoff shall undergo pretreatment such as sedimentation or filtration prior to infiltration.
(b) All dry weather flows shall be diverted from infiltration devices.
(c) Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used.
(d) Infiltration structural treatment BMPs shall be adequately maintained so that they remove pollutants to the maximum extent practicable.
(e) The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained.
(f) The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses.
(g) Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by each Copermittee.
(h) Infiltration structural BMPs shall be located a minimum of 100 feet horizontally from any water supply wells.

(8) Peak Discharge Rates – The SUSMP should include a proposed management plan, including a time schedule for implementation, for managing increases in peak runoff flow and increased volume. The peak discharge management plan should ensure that post-project runoff shall not exceed estimated pre-project rates and/or durations, where the increased storm water discharge rates and/or durations will result in increased potential for erosion or other adverse impacts to beneficial uses, attributable to changes in the amount and timing of runoff. The term duration means the period that flows are above a threshold that causes significant sediment transport and may cause excessive erosion damage to creeks and streams. The proposed peak discharge management plan should include:

(a) An evaluation of the cumulative impacts of urbanization of a watershed on storm water discharge and stream morphology in the watershed;
(b) A protocol to evaluate potential hydrograph change impacts to downstream watercourses from proposed projects;
(c) An identification of the rainfall event below which these standards and management requirements apply, or range of rainfall events to which this limitation applies;
(d) A description of how the Copermittees will incorporate these requirements into their local approval processes, or the equivalent; and
(e) Guidance on management practices and measures to address identified impacts.

iv) A description of how each Copermittee will revise their environmental review process to include requirements for evaluation of water quality effects and the

California Regional Water Quality Control Board
San Diego Region

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Gray Davis
Governor

November 6, 2002

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Dear Permittees:

**SUBJECT: ORDER No. 98-02 (NPDES No. CAS0108766)
2001-2002 ANNUAL PROGRESS REPORT AND
NOTICE OF VIOLATION NO. R9-2002-360**

Enclosed is a report of our findings regarding the 2001-2002 Annual Progress Report (Annual Report), dated September 15, 2002. The objective of our review was to determine compliance with the provisions of Order No. 98-02 and with the California Water Code (CWC) Section 13267 directive, dated April 17, 2002 and to assess the effectiveness of your programs to reduce pollutants in urban runoff to the maximum extent practical. We appreciate each Permittee's efforts to provide the information in the annual report.

A number of the comments in the staff report identify issues that require further clarification by the Permittees. Consequently, I have directed my staff to conduct a comprehensive field evaluation to enhance our understanding of your programs. The evaluations will be performed pursuant to California Water Code Section 13267(c) from November 19-22, 2002 and will consist of office and in-field reviews of each Permittee's program. We request that City and County have personnel familiar with the programs available during the evaluation. Please review the enclosed tentative agenda and if there are schedule conflicts, the itinerary can be adjusted.

Also enclosed is Notice of Violation No. R9-2002-360, which has been issued for the Permittees' failure to comply with Order No. 98-02, Appendix 1, Part D and to correct deficiencies and omissions in the monitoring program as specified by the Regional Board CWC § 13267 directive, dated April 17, 2002. The Regional Board will take into account the timeliness and

identification of appropriate mitigation measures. Examples of questions to be considered include:

(a) Could the proposed project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).
(b) Could the proposed project result in significant alteration of receiving water quality during or following construction?
(c) Could the proposed project result in increased impervious surfaces and associated increased runoff?
(d) Could the proposed project create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?
(e) Could the proposed project result in increased erosion downstream?
(f) Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?
(g) Is project tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?
(h) Could the proposed project have a potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters?
(i) Could the proposed project have a potentially significant adverse impact on ground water quality?
(j) Could the proposed project cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?
(k) Can the project impact aquatic, wetland, or riparian habitat?

v) A proposed education program to educate Copermittee staff and developers on requirements to reduce storm water pollution from new developments and significant redevelopment. The program should include:

(1) Internal: Municipal Staff and Others

(a) Federal, state, and local water quality laws and regulations applicable to development projects;
(b) The connection between land use decisions and short and long-term water quality impacts (i.e., impacts from land development and urbanization); and
(c) How impacts to receiving water quality resulting from development can be minimized (i.e., through implementation of various source control and structural BMPs).

(2) External: Project Applicants, Developers, Contractors, Property Owners, Community Planning Groups

As early in the planning and development process as possible, each Copermittee shall implement a program to educate project applicants, developers, contractors, property owners, and community planning groups on the following topics:

(a) Federal, state, and local water quality laws and regulations applicable to development projects;

(b) Required federal, state, and local permits pertaining to water quality;

(c) Water quality impacts of urbanization; and

(d) Methods for minimizing the impacts of development on receiving water quality.

f) Construction Component

i) A proposed time schedule for updating each Copermittee's grading ordinance, as necessary, to require the implementation of BMPs and other measures during all construction activities, including the following BMPs or their equivalent:

(a) Erosion prevention;
(b) Seasonal restrictions on grading;
(c) Slope stabilization requirements;
(d) Phased grading;
(e) Revegetation as early as feasible;
(f) Preservation of natural hydrologic features;
(g) Preservation of riparian buffers and corridors;
(h) Maintenance of all source control and structural treatment BMPs; and
(i) Retention and proper management of sediment and other construction pollutants on site.

ii) A proposed time schedule to include the following, or equivalent, grading project requirements in local grading and construction permits:

(a) Require project proponent to develop and implement a plan to manage storm water and non-storm water discharges from the site at all times;
(b) Require project proponent to minimize grading during the wet season and coincide grading with seasonal dry weather periods to the extent feasible. If grading does occur during the wet season, require project proponent to implement additional BMPs for any rain events which may occur, as necessary for compliance with this Order;
(c) Require project proponent to emphasize erosion prevention as the most important measure for keeping sediment on site during construction;
(d) Require project proponent to utilize sediment controls as a supplement to erosion prevention for keeping sediment on-site during construction, and never as the single or primary method;
(e) Require project proponent to minimize areas that are cleared and graded to only the portion of the site that is necessary for construction;
(f) Require project proponent to minimize exposure time of disturbed soil areas;
(g) Require project proponent to temporarily stabilize and reseed disturbed soil areas as rapidly as possible;
(h) Require project proponent to permanently revegetate or landscape as early as feasible;
(i) Require project proponent to stabilize all slopes; and
(j) Require project proponents subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities, (hereinafter General Construction Permit), to provide evidence of existing coverage under the General Construction Permit.

iii) A complete inventory of construction sites, prioritized as high, medium, or low threat to water quality. In evaluating threat to water quality each Copermittee should consider (1) soil erosion potential; (2) site slope; (3) project size and type; (4) sensitivity of receiving water bodies; (5) proximity to receiving water bodies; (6)

5. Nitrate Nitrogen
6. Ammonia Nitrogen
7. Phenol
8. Surfactants (MBAS)

(e) Analytical Monitoring Parameters: At a minimum, collect samples for analytical laboratory analysis of the following constituents:

1. Total Hardness
2. Oil and Grease
3. Diazinon and Chlorpyrifos
4. Cadmium (Dissolved)
5. Copper (Dissolved)
6. Lead (Dissolved)
7. Zinc (Dissolved)
8. Enterococcus Bacteria
9. Total Coliform Bacteria
10. Fecal Coliform Bacteria

(f) If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.

(2) The Dry Weather Monitoring Program should include criteria for dry weather inspection, analytical and field screening monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify the source causing the exceedance of the criteria.

(3) Dry weather analytical and field screening monitoring stations identified to exceed dry weather monitoring criteria for any constituents should continue to be screened in subsequent years.

(4) The Dry Weather Monitoring Program should include procedures for source identification follow up investigations in the event of exceedance of dry weather analytical and field screening monitoring result criteria.

(5) The Dry Weather Monitoring Program should include procedures to eliminate detected illicit discharges and connections. These procedures should be consistent with each Copermittee's Illicit Connections and Discharge and Elimination component of its storm water management plan.

(6) During monitoring, the accuracy of the MS4 map and should be confirmed.

(7) The Dry Weather Monitoring Program should include a proposed plan to annually summarize and report the monitoring results.

non-storm water discharges; and (7) any other relevant factors. At a minimum, the following sites shall be high priority:

(a) Sites that are 50 acres or greater in size and grading will occur during the wet season; and
(b) Sites that are 5 acres or greater and tributary to a Clean Water Act section 303(d) water body impaired for sediment or within or directly adjacent to or discharging directly to an ESA.

iv) A description of specific pollution prevention, source control, and treatment control BMPs to reduce pollutants to the MEP from runoff from construction sites that are to be implemented for each priority category during the life of the permit, accompanied with a proposed schedule for implementing the BMPs and a description of how they will be required.

v) A plan for inspecting construction sites for compliance with ordinances and permits. Inspections should include a review of site erosion control and BMP implementation plans. The plan should include frequencies for inspecting each priority category, inspection procedures, and follow-up actions for non-compliant sites.

vi) A description of how non-compliant sites that pose a threat to human or environmental health will be identified and the process for notifying the Regional Board.

vii) A description of appropriate educational and training measures to ensure that Copermittee staff, project applicants, contractors, developers, property owners, and other responsible parties have an understanding of the following:

(a) Federal, state, and local water quality laws and regulations applicable to construction and grading activities.
(b) The connection between construction activities and water quality impacts (i.e., impacts from land development and urbanization).
(c) How erosion can be prevented.
(d) How impacts to receiving water quality resulting from construction activities can be minimized (i.e., through implementation of various source control and structural BMPs).

g) Illicit Connection and Discharge Elimination Component

i) A description of a proposed program to actively seek and eliminate illicit discharges and connections. This program shall address all types of illicit discharges, except those listed as exempt in the current permit (Order No. 98-02).

ii) A description of a proposed dry weather analytical monitoring program to detect illicit discharges and connections (see Section 9 below).

iii) A description of proposed investigation and inspection procedures to follow-up on dry weather analytical monitoring results or other information that indicates potential illicit discharges or connections.

iv) A description of methods to prevent, respond to, contain, and clean up all spills, including sewage from treatment plants, private laterals and failing septic systems, in order to prevent entrance into the MS4.

v) A description of the mechanism to receive notification of spills from private laterals.

vi) A description of efforts to facilitate public reporting of illicit discharges and connections, including a public hotline.

i) MS4 Map: Each Copermittee shall develop or obtain an up-to-date labeled map of its entire MS4 and the corresponding drainage watersheds within its jurisdiction. The use of a Geographic Information System (GIS) is highly recommended, but not required. The accuracy of the MS4 map shall be confirmed and updated at least annually during monitoring activities.

ii) Monitoring Stations: Dry weather monitoring stations should be either major outfalls or outfall points (or any other point of access such as manholes) randomly located throughout the MS4, chosen by placing a grid cover over a drainage system map and identifying cells which contain a segment of the MS4 or major outfall; or, stations may be selected non-randomly provided adequate coverage of the entire MS4. Each major drainage area within each Copermittee's jurisdiction should contain at least one station. All stations should be clearly identified on the MS4 map as either a separate GIS layer or a map overlay.

iii) Determining Sampling Frequency: Dry weather analytical and field screening monitoring should be conducted at each identified station at least twice between May 1st and September 30th of each year or as more frequently as the Copermittee determines is necessary to detect and eliminate illicit discharges and illegal connections to the MS4. Each Copermittee should develop or revise written procedures that describe the criteria and process used to determine the number and frequency of inspections, field screening and analytical monitoring to be performed.

iv) Develop Dry Weather Analytical Monitoring Procedures: Each Copermittee should develop or revise written procedures for dry weather analytical and field screening monitoring (consistent with 40 CFR part 136), that should include field observations, field screening monitoring, and analytical monitoring.

(1) The Dry Weather Monitoring Program should be designed to emphasize frequent, geographically widespread inspections, monitoring, and follow up investigations to detect illicit discharges and illegal connections. At a minimum, the procedures must be based on or incorporate the following guidelines and criteria:

(a) At each site inspected or sampled, record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (e.g., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).

(b) If flow or ponded runoff is observed at a station and there has been at least seventy-two (72) hours of dry weather, shall make observations and collect at least one (1) set of grab samples for field screening and/or analytical testing that meets or exceeds the requirements described below.

(c) Perform field screening analysis on all sites with ponded or flowing water and at a minimum collect samples at no less than 25% of these sites for analytical testing.

(d) Field Screening Monitoring Parameters: At a minimum, conduct field screening analysis of the following constituents:

1. Specific conductance (calculate estimated Total Dissolved Solids).
2. Turbidity
3. pH
4. Reactive Phosphorous

vii) A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and other toxic materials.

viii) A description of controls and measures to be implemented to limit infiltration of seepage from sanitary sewers to MS4s.

ix) A description of routine preventative maintenance activities on the sanitary sewer system (where applicable) and the MS4.

h) Public Participation and Education Component

A proposed education and outreach program designed to accomplish the following:

- Measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and
- Measurably change the behavior of target communities and thereby reduce pollutant releases to MS4 and the environment.

The education and outreach program should be designed to integrate a variety of methods to ensure that the appropriate messages reach the target communities listed below. Outreach methods may include training, workshops, distributing educational material, advertising, public service announcements, radio, TV, special events and activities, and other appropriate media.

i) At a minimum, the education program should address the following target communities:

- Municipal departments and personnel;
- Construction site owners and developers;
- Industrial owners and operators;
- Commercial owners and operators;
- Residential community, general public, and school children; and
- Quasi-governmental agencies/districts (i.e., educational institutions, water districts, sanitation districts, etc.)

ii) The education program for each target community should contain information on the following topics where applicable:

- State and Federal water quality laws;
- Requirements of local municipal permits and ordinances (e.g., storm water and grading ordinances and permits);
- Impacts of urban runoff on receiving waters;
- Watershed concepts (i.e., stewardship, connection between inland activities and coastal problems, etc.);
- Distinction between MS4s and sanitary sewers;
- Importance of good housekeeping (e.g., sweeping impervious surfaces instead of hosing);
- Pollution prevention and safe alternatives;
- Household hazardous waste collection;
- Recycling;
- BMPs: Site specific, structural and source control;
- BMP maintenance;
- Non-storm water disposal alternatives (e.g., all wash waters);

(8) Assessing the overall health of receiving waters and identifying long term trends in receiving water quality.

b) The location of all sampling points, clearly identified on a map;

c) Why the locations are representative;

d) The frequency of sampling;

e) Parameters to be sampled; and

f) A description of sampling equipment and quality assurance plans.

g) The specific needs of the permitted area must be considered when developing the monitoring program. Based on the land uses in the permitted area and to obtain data consistent with other municipal storm water programs, the Regional Board recommends the following components, at a minimum, for the monitoring program for the Santa Margarita Watershed in Riverside County:

i) **Mass Emissions** – select and monitor receiving water stations for mass emissions of storm water and urban runoff in the Santa Margarita River and its major tributaries, including but not limited to Murrieta, Temecula, and Warm Springs Creeks. At least one station in the Santa Margarita River should be located near the San Diego County line to determine mass emissions from the permitted area of the watershed. At least one reference station should be monitored in a natural area as a comparison to help identify pollutants from urban areas.

ii) **Toxicity Monitoring** – develop a program to evaluate the extent and causes of toxicity in receiving waters.

iii) **Bioassessment** – develop a bioassessment program, including station selection, to assess the biological integrity of receiving waters, to detect biological responses to pollution, and to identify probable causes of impairment not detected by chemical and physical water quality analysis. Reference stations should be selected and monitored to determine the biological integrity of unimpacted areas.

iv) **Study of Impacts from New Development and Construction** – develop a study to monitor impacts to receiving waters from new development and construction activity. The proposed study should include the selection of monitoring sites in Murrieta and Temecula, and other rapidly developing areas, that are representative of sub-watersheds that are currently being developed, or have been recently developed. Reference stations shall also be monitored for this study. Ideally, reference stations should be in the same receiving water as another monitoring station, upstream of the developed, or developing area.

v) **BMP Effectiveness** – conduct, or participate in studies to evaluate the effectiveness of structural and treatment control BMPs.

vi) **Peak Discharge Impact Study** – conduct a study to evaluate peak flow control and to determine numeric criteria for peak flow to prevent or minimize downstream erosion of natural stream channels and banks caused by urbanization.

9) **Dry Weather Analytical and field Screening Monitoring**

a) Compile a list of the sources of all illicit discharges identified during the previous permit term.

b) Develop a proposed program to identify and monitor representative outfalls to receiving waters for the purpose of detecting and eliminating illicit connections and illegal discharges to the MS4. The Dry Weather Monitoring Program should include the following components:

- Pet and animal waste disposal;
- Proper solid waste disposal (e.g., garbage, tires, appliances, furniture, vehicles);
- Equipment and vehicle maintenance and repair;
- Public reporting mechanisms;
- Green waste disposal;
- Integrated pest management;
- Native vegetation;
- Proper disposal of boat and recreational vehicle waste;
- Traffic reduction, alternative fuel use; and
- Water conservation

iii) In addition to the topics listed above, the municipal, industrial, commercial, and quasi-governmental communities should also be educated on the following topics where applicable:

- Basic urban runoff training for all personnel;
- Additional urban runoff training for appropriate personnel;
- Illicit Discharge Detection and Elimination observations and follow-up during daily work activities;
- Lawful disposal of catch basin and other MS4 cleanout wastes;
- Water quality awareness for Emergency/First Responders;
- California's Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction);
- California's Statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities;
- SDRWQCB's General NPDES Permit for Groundwater Dewatering
- 401 Water Quality Certification by the SDRWQCB;
- Statewide General NPDES Utility Vault Permit (NPDES No. CAG990002);
- SDRWQCB Waste Discharge Requirements for Dredging Activities;
- Local requirements beyond statewide general permits;
- Federal, state and local water quality regulations that affect development projects;
- Water quality impacts associated with land development;
- Alternative materials & designs to maintain peak runoff values;
- How to conduct a storm water inspection;
- Potable water discharges to the MS4;
- Dechlorination techniques;
- Hydrostatic testing;
- Spill response, containment, & recovery;
- Preventive maintenance; and
- How to do your job and protect water quality.

iv) In addition to the topics listed in h.ii. above, residential, general public, and school children communities should be educated on the following topics where applicable:

- Public reporting information resources;
- Residential and charity car washing; and
- Community activities related to storm water and water quality and ways to get involved.

v) A description of the content, form, and frequency of proposed education efforts for each target community.

5) **Assessment of Program Effectiveness**

a) A discussion of the effectiveness of the current storm water management program; and

b) A description of strategies to be used for assessing the long-term effectiveness of your storm water management programs. The assessment strategy shall identify specific direct and indirect measurements that each Copermittee will use to track the long-term progress of its individual storm water management programs towards achieving improvements in water quality. Methods used for assessing effectiveness should include surveys, pollutant loading estimations, and receiving water quality monitoring.

6) **Fiscal Analysis Component**

a) An estimate of capitol and operating costs necessary for the proposed storm water management program.

b) List available sources of funding and restrictions on these sources.

7) **Characterization Data**

a) Monthly mean rainfall estimates (or summary of weather bureau data) and the monthly average number of storm events;

b) Existing quantitative data describing the volume and quality of discharges from the MS4, including a description of the outfalls sampled, sampling procedures, and analytical methods used;

c) Estimated annual and seasonal pollutant loadings and event mean concentrations based on data from previous monitoring;

d) A map and list of water bodies that receive discharges from the MS4, including downstream segments, lakes, and estuaries, where pollutants from the system discharges may accumulate and cause water degradation and an assessment of water quality of all receiving waters, including a description of known water quality impacts. The description of water quality impacts must include a discussion of those water bodies that were cited in a 305(b) report, the 303(d) list, and other reports identifying sensitive watersheds;

8) **Monitoring Program**

A proposed 5-year monitoring program to be carried out during the permit term. When developing the proposed monitoring program, the Copermittees should consider previous monitoring data and the information requested in our letter regarding annual reporting, dated April 17, 2002.

The monitoring program should include the following:

a) Clearly defined goals. Goals should include:

(1) Assessment of compliance with the MS4 permit;
(2) Measure and evaluate the effectiveness of the storm water management plans;
(3) Characterizing discharges;
(4) Evaluating the sources of specific pollutants;
(5) Evaluating the performance of specific BMPs;
(6) Evaluating the impacts on receiving waters from existing development, industry, construction and new development;
(7) Identifying the full range of chemical, physical, and biological water quality impacts from urban runoff; and